



**Zambia HIV/AIDS Prevention, Care and Treatment (ZPCT) Partnership**  
**Cooperative Agreement No. 690-A-00-04-00319-00**  
**Quarterly Report for July 1 – September 30, 2006**  
**Submitted by Family Health International (FHI)**  
**October 30, 2006**

## **1. EXECUTIVE SUMMARY**

The Zambia HIV/AIDS Prevention, Care and Treatment (ZPCT) Partnership works with the Ministry of Health (MOH), the Provincial Health Offices (PHOs), and District Health Management Teams (DHMTs) to strengthen and expand HIV/AIDS related services in five provinces: Central, Copperbelt, Luapula, Northern and North Western. The Partnership supports the Government of the Republic of Zambia (GRZ) goals of reducing prevalence rates and providing antiretroviral therapy (ART) by implementing technical, program and management strategies to initiate, improve and scale-up prevention of mother-to-child transmission (PMTCT), counseling and testing (CT) and clinical care services for people living with HIV/AIDS (PLHA), including ART.

The ZPCT Partnership has been implemented in phases. The Phase 1 activities, initiated in April 2005, were focused on initiation and strengthening of services in 43 facilities in nine districts in the five project provinces. In Phase 2, initiated in October 2005, the Partnership continued assistance to the facilities supported during Phase 1, while expanding project activities to an additional 15 districts and 39 facilities. ZPCT continued supporting all 82 facilities in 24 districts. In addition, ZPCT expanded support to HIV/AIDS services, including ART to five new health facilities, including one in a new district, Mufumbwe District in North Western Province, through agreements signed during this reporting period. Technical assistance, staff training and other preparatory activities have been and services will be initiated in all sites early next quarter.

Key activities and achievements for this reporting period include:

- CT services are ongoing in 85 health facilities. 15,491 individuals received CT services in ZPCT-supported facilities this quarter.
- PMTCT services were provided in 84 ZPCT-supported facilities. 13,997 women were provided with PMTCT services (including CT), and 1,160 were provided with a complete course of prophylaxis ARVs during this quarter.
- Ongoing assistance (training, technical assistance visits, and/or renovation) was provided to strengthen clinical palliative care services in 86 health facilities. 32,510 individuals received palliative care in ZPCT-supported health facilities during this quarter.
- A total of 4,276 new clients (including 248 children) were initiated on antiretroviral therapy through 39 ART centers (including 11 outreach sites) this quarter. ART services were available in 24 of the 25 districts supported by ZPCT. By the end of this reporting period, 25,003 individuals were receiving antiretroviral therapy at ZPCT-supported sites; of these, 1,597 were children.
- Twenty-four technical training courses were conducted:
  - 59 HCWs were trained in basic CT through three, two-week workshops and 15 HCWs participated in a one-week refresher CT course. In addition, 11 HCWs were trained as counselor supervisors in a two-week workshop. One lay counselor training was conducted reaching 22 community volunteers.
  - 85 HCWs were trained in PMTCT through four, two-week workshops and 21 HCWs participated in a one-week refresher PMTCT course. Twelve HCWs were trained in couple counseling in Luapula Province.
  - 46 HCWs were trained in ART and Management of Opportunistic Infections (OI) in two in-house trainings at Kitwe Central Hospital and Mansa General Hospital, and 24 HCWs through a two-week workshop for new ART sites. 82 HCWs from 20 health facilities were trained in Pediatric Management

of OIs/ART in a series of three-day on-site trainings in six districts in Northern Province and a one-week workshop in Kitwe.

- 10 HCWs participated in a two-day adherence counseling training workshop in Luapula Province.
  - 50 community members were trained as ART adherence support workers (ASWs) in six 10-day workshops. These ASWs were placed in 27 health facilities in the five provinces.
  - As part of the CT, PMTCT and ART/OI courses, 168 HCWs were trained in data collection and reporting.
- Quality assurance and quality improvement (QA/QI) tools in CT, PMTCT, ART, clinical palliative care, laboratory and pharmacy (developed by ZPCT) are being implemented in all five provinces. The tools will be further refined in the next 6 months. In addition, ZPCT is developing a database to analyze results from the administration of the tools.
- ZPCT developed a strategy to sustain activities at the end of the agreement. The management and technical teams have developed a Facility Graduation Sustainability Plan to use QA/QI tools to determine when a facility has achieved and sustained a high level of technical quality in implementation of HIV/AIDS services and requires minimal support from ZPCT. On-going monitoring and supervision will continue to be provided by the PHO or DHMT.
- ZPCT procured and installed seven ABX Micros 60 for hematology analysis. Reagents for the Sysmex pocHi-100 (controls), Olympus AU400, and ABX Micros 60 were received, stored at Medical Stores Limited (MSL) and/or distributed this quarter.
- Provincial staff are making progress in establishing and documenting district-wide referral networks in nine Phase 1 districts, including identification of a referral coordinating unit, development of tools and conducting quarterly referral meetings.
- ZPCT has identified and worked with 17 community groups to develop community purchase orders (CPOs) to enable the groups to conduct mobilization activities in communities surrounding ZPCT-supported facilities. Community mobilization activities are underway in four of the five ZPCT-supported provinces.
- Community job aids were approved by Ministry of Health, printed and distributed to all ZPCT Provincial Offices. The job aids have been used during the orientation of community level partners as a tool to facilitate the dissemination of key messages around CT and PMTCT accurately.
- Amendments were executed for all 33 recipient agreements which ended on September 30, 2006, extending activities for an additional year and adding on two new health facilities (Ipusukilo Health Center in Kitwe District and Kasanda Health Center in Kabwe District). In addition, ZPCT developed and executed three new recipient agreements with ART Plus-Up funding to add three new health facilities; bringing the total number of recipient agreements to 36, supporting 87 health facilities in 25 districts.
- This quarter, ZPCT signed a Memorandum of Understanding with Ndola Catholic Diocese to increase access to ART services in Ndola, Kitwe and Chingola Districts in Copperbelt Province, through provision of outreach services at three home-based care centers implemented by the Ndola Diocese Integrated AIDS Program.
- Agreements with the three associate partners were amended during this period, including extending Expanded Church Response's (ECR) activities through June 30, 2007 (including expansion of activities to Chingola District) and extending Churches Health Association of Zambia's (CHAZ) activities through March 31, 2007. The subagreement with Kara Counseling and Training Trust (KCTT) was closed-out this quarter, and a firm-fixed price contract executed to support five counselor supervision training courses (one in each province) through March 31, 2007.
- ZPCT staff members continue to provide assistance and leadership on technical and programmatic issues in all key areas at the central level. ZPCT actively participates on eight national technical working groups, as well as several ad-hoc implementation groups.
- ZPCT participated in planning for the roll-out of the Continuity of Care Patient Tracking System (CCPTS), including review of forms to be piloted next quarter.
- ZPCT completed the COP 07 submission.

Results for the quarter are summarized in the following table:

**Services in 86 Facilities Receiving ZPCT Support  
July – September 2006**

Indicator	Achievements May 1 2005 to September 30 2006						
	Workplan (Apr 06 to Mar 07)	Quarterly Achievements (1 Jul 06 to 30 Sept 06)			Achievement (Apr 06 to Sep 06)	Percent Achievement (Apr 06 to Sep 06)	Cumulative LOP Achievements (May 05 to Sept 06)
	TARGET	FEMALE	MALE	TOTAL			
<b>CT</b>							
Service Outlets							85
Persons Trained in CT	402*			119	221	55%	601
Persons receive CT services	43,990	7,914	7,577	15,491	29,103	66%	62,361
<b>PMTCT</b>							
Service Outlets							84
Providers trained in PMTCT	200			106	106	53%	354
Pregnant women provided with PMTCT service, including CT	30,033	13,997		13,997	26,792	89%	53,597
Pregnant women provided with a complete course of ART prophylaxis	6,757	1,160		1,160	2,230	33%	4,093
<b>Basic Health Care and Support</b>							
Strengthen Facilities to provide clinical palliative care services							86
Service Outlets/programs providing general HIV-related palliative care							86
Persons provided OI management and/or prophylaxis		19,216	13,294	32,510			32,510
Persons provided with general HIV-related palliative care		19,216	13,294	32,510			32,510
Persons trained to provide general HIV- related care	100			70	95	95%	478
<b>Treatment</b>							
ART service outlets providing treatment							39
Health workers trained	100			70	95	95%	478
New clients for ART	13,686	2,545	1,731	4,276	8,904	65%	19,719
Persons receiving treatment	25,152	14,862	10,141	25,003	25,003	99%	25,003
<b>Pediatric Treatment</b>							
Health workers trained in pediatric care	150			82	141	94%	141
New pediatric clients for ART	395	112	136	248	542	137%	1,266
Pediatric patients receiving treatment	1,019	818	779	1,597	1,597	157%	1,597
<b>TB and Care</b>							
TB infected clients receiving CT services	3,333	564	547	1,111	1,902	57%	1,902
HIV-infected clients attending HIV care/treatment services that are receiving treatment for TB disease (new cases)	1,641	192	192	384	668	41%	668

\* Includes 30 couple counselors and 112 lay counselors.

## 2. INTRODUCTION

The Zambian HIV/AIDS Prevention, Care and Treatment (ZPCT) Partnership works with the Ministry of Health (MOH), the Provincial Health Offices (PHOs), and District Health Management Teams (DHMTs) to strengthen and expand HIV/AIDS related services in five provinces: Central, Copperbelt, Luapula, Northern and North Western. The Partnership supports the Government of the Republic of Zambia (GRZ) goals of reducing prevalence rates and providing antiretroviral treatment (ART), by implementing program and management strategies to initiate, improve and scale-up prevention of mother-to-child transmission (PMTCT), counseling and testing (CT) and clinical care services for people living with HIV/AIDS (PLHA), including ART programs in all ZPCT-supported districts in these five provinces. ZPCT collaborates with the PHOs and DHMTs to strengthen service delivery at public sector facilities and to strengthen networks for referral between these and other public sector health services and communities. The Partnership also collaborates actively with other donor agencies and partner organizations to build on, rather than duplicate, ongoing HIV/AIDS projects.

ZPCT has a national policy focus with interventions at national, provincial, district and community levels utilizing health clinics, hospitals and community service delivery programs. At the national level, the program offers technical assistance and coordination to the MOH and the National AIDS Council (NAC), as requested. At the provincial level, the program supports the GRZ through technical assistance and coordination in five provinces, and at the district level ZPCT assists the DHMTs and selected health facilities to provide, improve, and expand HIV/AIDS services. The Partnership also works with and in communities to create demand for services and strengthen linkages between facilities and communities.

ZPCT activities have been created in a flexible manner so that GRZ requests can be accommodated as needs arise. Furthermore, all activities and related monitoring and evaluation processes and indicators are designed to meet USAID and the President's Emergency Plan for AIDS Relief requirements, and to be compatible with established government health management information systems (HMIS).

## 3. OBJECTIVES

The specific objectives of the ZPCT Partnership are to:

- Increase access to and use of HIV counseling and testing (CT)
- Increase access to and use of interventions for preventing mother-to-child transmission (PMTCT)
- Increase access to and strengthen delivery of clinical care for HIV/AIDS, including diagnosis, prevention and management of opportunistic infections (OIs), and other HIV related conditions and symptoms
- Increase access to and strengthen delivery of ART services at the provincial and district levels

These objectives will be met within the framework of the GRZ plan for scale up of ART programs and in full partnership with the MOH at all levels.

## 4. ACTIVITIES AND ACCOMPLISHMENTS FOR THE QUARTER

### 4.1. Program Management

#### 4.1.1. ZPCT Partners

ZPCT held a two-day meeting with partners (MSH, CHAZ, KCTT and ECR) on September 26-27, 2006. Management and leadership from each of the partner organizations convened for the opening sessions which included updates from each partner on activities, progress to date, as well as a discussion on technical and implementation strategies, improving communication and collaboration, challenges and way forward.

The opening session was followed by a working meeting with CHAZ and ECR program and M&E staff, to develop and review quarterly implementation and travel plans, M&E indicators, and roles and responsibilities.

Management Sciences for Health (MSH) continues, as the partner responsible for laboratory and pharmaceutical assistance, to provide technical leadership within ZPCT and nationally in these areas.

## **Associate Partners**

Churches Health Association of Zambia (CHAZ) is continuing to support four mission health facilities, two identified during Phase 1 (St. Kalembo Health Center in Kabompo District, North Western Province and Chilubula Mission Health Center in Kasama, Northern) as well as two facilities that were added last quarter (Mambilima Mission Health Center in Mwense District and Lubwe Mission Health Center in Samfya District, both in Luapula Province). The renovation works at St. Kalembo for the laboratory and CT/PMTCT rooms were completed this quarter.

The CHAZ subagreement was amended to incorporate the revised scope of work for Chilubula Health Center, which was modified due to the construction of a new laboratory by Becton Dickinson and the Catholic Medical Mission Board. Funds were reallocated to renovate the CT rooms, HIV clinical care room and the pharmacy and refurbishments have begun.

Refurbishments at Mambilima and Lubwe Mission Health Centers are in progress, with work at Mambilima close to completion. Procurement of equipment is progressing for these facilities, with ZPCT taking the lead.

ZPCT and CHAZ program representatives met on September 14, 2006, to clarify data collection and reporting issues, particularly in facilities with both Global Fund and ZPCT support for ART services.

Kara Counseling and Training Trust (KCTT) is responsible for training of counselor supervisors at ZPCT-supported health facilities and at the district level.

This quarter, ZPCT closed-out the subagreement with KCTT (ended on July 30, 2006). Following this, ZPCT developed and executed a firm fixed-price contract with KCTT through March 31, 2007, which includes five counselor supervision training courses (one in each province). KCTT has completed the theory component of the first of the five courses, training 11 experienced counselors from 10 health facilities in Central Province. In the next quarter, KCTT will complete the follow-up supervision visits for these trainees, as well as counseling supervision trainings in Luapula, Northern and Copperbelt Provinces.

Expanded Church Response (ECR) is working through church communities to increase knowledge and demand for HIV/AIDS services. ECR has continued to provide technical support to the church coordinating committees around Makululu and Mahatma Gandhi Health Centers in Kabwe, and around Chibefwe and Chalata Health Centers in Mkushi (Central Province). The ECR Program Officer visited Mkushi and Kabwe this quarter to monitor activities, reorganize two of the existing coordinating committees to strengthen implementation of activities. In addition, two ECR representatives were trained as adherence support workers through ZPCT trainings.

The subagreement with ECR was amended this quarter, extending activities through June 30, 2007 and expanding community mobilization activities to Chingola District, Copperbelt Province. ECR will work with ZPCT in the next quarter to initiate activities linked to three ZPCT-supported health facilities in Chingola.

ZPCT continues to work with colleagues from associate partner organizations to build capacity to contribute to HIV/AIDS services in Zambia.

### **4.1.2. Facility Support**

#### **Recipient Agreements**

At the end of this quarter, ZPCT was strengthening HIV/AIDS services in 87 facilities in 25 districts through 36 recipient agreements. ZPCT developed and executed three new recipient agreements with ART Plus-Up funding (Ronald Ross Hospital and Roan Antelope Hospital in Copperbelt Province and Mufumbwe District Health Office for a facility in North Western Province). Amendments were executed for 33 recipient agreements which ended on September 30, 2006, extending activities for an additional year. Through these amendments, ZPCT added activities to support nine additional ART outreach sites (including services for two new health facilities – Ipusukilo Health Center in Kitwe District, Copperbelt Province and Kasanda Health Center in Kabwe District, Central Province). In addition, ZPCT included in the amendments critical renovations, equipment and furniture and other support to strengthen ongoing HIV/AIDS services in the health facilities. This support includes establishing testing corners in TB units, PMTCT and CT services as feasible, funds for printing HIV/AIDS related forms and registers, transport reimbursements for data entry clerks to support monthly data collection at ZPCT-supported

non-ART sites and ongoing support for transport reimbursements for lay counselors and health care workers.

ZPCT has signed a Memorandum of Understanding with Ndola Catholic Diocese to increase access to ART services in Ndola, Kitwe and Chingola Districts in Copperbelt Province, through provision of outreach services at three home-based care centers implemented by the Ndola Diocese Integrated AIDS Program.

#### Renovations and Procurement:

Renovations to Phase 1 facilities are complete with the exception of facilities with special construction needs and additional renovations that have been added in amendments executed in the past two quarters. The quality of completed refurbishments has been certified by a ZPCT-hired architect in collaboration with the relevant provincial Public Works and Supply Department.

Renovations for Phase 2 health facilities are underway, with contractors on site for most facilities. Additional needs identified in amendments executed in the past two quarters have been either advertised, or added to the scope of work for contracts that may not have been finalized. ZPCT provincial office staff worked closely with the DHMTs and facility managements in the vendor selection process as well as ongoing monitoring. Renovations are in various stages of progress.

Major medical equipment, motorbikes, computers and printers have been purchased for all facilities and distribution has been ongoing. Orders for remaining equipment for Phase 1 and 2 health facilities, as well as newly identified equipment under ART Plus-Up funding have been placed.

Training: As part of the site preparation ZPCT conducted jointly with the PHOs, DHMTs, and facilities, training needs were determined for each facility. Training for facilities was planned and participants selected with the PHOs and DHMTs, and facility management.

During this quarter, staff from ZPCT-supported health facilities attended courses in CT (59 HCWs for basic and 15 for refresher), ART/OI (70 HCWs), PMTCT (85 HCWs in basic and 21 in refresher) and ART/OI Pediatric (82 HCWs). In addition, 11 HCWs were trained in counseling supervision, 12 in couple counseling and 10 in adherence counseling. A one-day module on monitoring and evaluation was included in the CT and PMTCT courses, and one ART/OI course, reaching 168 HCWs.

ZPCT continues to look for time-efficient and cost-effective ways to provide training. The ART/OI pediatric trainings in Northern Province were provided as on-site trainings at twelve health facilities in six districts, with three days of training per facility. In addition, 46 HCWs were trained in ART/OI through two in-house trainings at Kitwe Central Hospital and Mansa General Hospital.

In addition to technical workshops for health care workers, 22 lay counselors were trained from Copperbelt and North Western Provinces, and 50 adherence support workers from all five provinces.

Details of training for each program area are provided in Section 4.2 and in Attachment B, *ZPCT Training Courses*.

#### **4.1.3. Strategies to Supplement Human Resources at ZPCT-supported Facilities**

Original plans to attach staff members to ZPCT-supported facilities have been put on hold due to delays in reaching agreement on terms and conditions with the MOH, and, more recently, budget constraints. ZPCT has developed other approaches, described below, to supplement key human resources.

Health Care Workers in Facilities: A ZPCT policy and procedure to provide limited support for transport costs for extra shifts to improve coverage of key services in ZPCT-supported facilities was approved and facility-level plans and district-level budgets developed in all districts. ZPCT provincial offices have worked with DHMTs and facilities on implementation of these plans. This initiative has been implemented at health facilities and is being monitored closely to determine its effectiveness and feasibility.

Lay Counselors and Adherence Support Workers: ZPCT continues to train and place lay counselors and adherence support workers in facilities to relieve some burden for HCWs in the facilities, and to improve services and well-being of PLHA (in the case of ASWs).

Data Entry Clerks: The work of the 38 data entry clerks trained and placed by ZPCT at ART facilities has already resulted in improved timeliness and quality of all HIV/AIDS data at these sites. To further

improve data quality, these data entry clerks will assist in the compilation of ZPCT data from sites in addition to the ART sites where they are assigned. Data entry clerks will work one day a month in selected additional facilities.

Outreach: ART outreach allowances have been included in both Phase 1 and Phase 2 recipient agreements and are also being included in amendments for outreach facilities to be supported by ART Plus-Up funds. This includes support for staff from the DHMT or other facilities to provide services at selected health facilities without a medical doctor, laboratory staff and/or pharmacy staff to initiate and monitor clients on ART.

#### **4.1.4. Other Program Management Activities**

This quarter, an associate partners meeting was held in Lusaka, as well as two in-services trainings:

- Partner's Meeting (September 26-27, 2006): The two-day partners meeting was split into two components – a half-day meeting with leadership from MSH, CHAZ, KCTT and ECR, followed by a working meeting with CHAZ and ECR program and M&E staff to review roles and responsibilities, M&E indicators and develop quarterly implementations plans.
- In-service Training Sessions: Two routine in-service sessions were conducted for Lusaka Office program staff. One focused on the use of internal reports to monitor implementation of agreements, and the second on support and monitoring of the QA/QI system.
- Information Technology (IT) Capacity Building for Provincial Staff: ZPCT IT staff traveled to each of the five provincial offices to conduct 2-weeks of computer training for provincial staff. Group training sessions on use of Microsoft Office applications (Word, Excel, and Access) was provided, followed by individual support. The IT activities are funded by FHI general and administrative funds, rather the program funds.

This quarter, ZPCT has developed a decentralization process and standards to decentralize provincial offices in selected program, technical and financial areas. These include execution of community purchase orders, implementation of the health facility petty cash system, program and financial reporting, and processing payments for training. In the next quarter, the Lusaka office will provide support to the provincial offices to decentralize in the selected areas, and initiate a decentralization review process.

#### **4.1.5. Budget**

The appreciation of the Zambian Kwacha, which led to extensive planning and re-budgeting in past quarters, has eased. The exchange rate has stabilized at between 3500 and 3900.

### **4.2. Technical Program Areas**

The major activities undertaken during this quarter in each of the technical components of the ZPCT Partnership are described below. For more details on the strategies in each area, refer to Attachment C: *ZPCT Technical Strategies*.

#### **4.2.1 Counseling and Testing (CT)**

At the end of this quarter, CT services were being provided in 85 of the 87 ZPCT-supported health facilities in the 25 ZPCT-supported districts.

##### **4.2.1.1 CT Training**

Under the current annual work plan period (April 2006 – March 2007), ZPCT plans to train 100 HCWs in basic counseling skills, 100 in refresher CT, 60 HCWs in counseling supervisions skills, and 112 lay counselors to complement those trained during the first eighteen months of implementation. During this quarter, ZPCT-supported three training courses for 59 HCWs in basic CT skills in Luapula, Northern and Copperbelt Provinces. Each course included two weeks of theory and six weeks of supervised practicum. For the current work plan (April 2006 – March 2007, with four trainings completed, 79 HCWs have received basic CT training, reaching 79% of the target. Cumulatively (May 2005 – September 2006), ZPCT has trained 285 HCWs in basic counseling and testing skills.

In addition to the basic CT courses, ZPCT-supported the following training courses:

- One course in counseling supervision for experienced counselors to improve supervision skills and ensure quality of counseling services being provided in the facilities was held. 11 HCWs from 10 facilities in Central Province were trained. Cumulatively, 125 HCWs have been trained in counseling supervision.
- One refresher CT course in Central Province for 15 HCWs that were trained more than five years ago when HIV testing and ART were not part of the counseling course.
- Twelve HCWs were trained in couple counseling skills in Luapula Province. Cumulatively, 24 HCWs have had couple counseling skills training since April 2006.
- Lay counselor training: 22 community members in the Copperbelt were trained as lay counselors. Following six weeks of practical experience, they will be certified and placed at health facilities to provide HIV counseling services, supplementing the work done by HCWs.

#### **4.2.1.2 CT Services**

At the end of this quarter, CT services were being provided in 85 of the 87 ZPCT-supported health facilities in 25 districts. This includes four new health facilities supported through ART Plus-Up funding.

Kanyihampa Health Center in North Western Province still has not initiated CT services due to lack of available space for counseling. Irregularities in the bidding process have delayed completion of refurbishments at this health center, required for initiation of CT services. However, clients seeking CT services at Kanyihampa are referred to Mwinilunga District Hospital which is within the same grounds.

Ongoing technical assistance was provided to strengthen CT services in all 85 facilities providing CT services. In addition, technical assistance was provided to strengthen CT services at Mufumbwe District Hospital as part of the new agreement with the hospital. Data from this facility will be reported in the next quarter.

During this quarter, ZPCT staff continued to focus on these key CT issues:

- Working with facilities to integrate CT into TB, sexually transmitted infections (STI), and family planning (FP) services;
- Introduction and implementation of QA/QI tools;
- Strengthening procedures and conditions to provide same-day testing and results, particularly in health facilities that have yet to provide same-day results.

To facilitate HIV testing and provision of same-day results, 76 of the 85 facilities now provide testing within the CT rooms by trained counselors. ZPCT will continue to support the remaining health facilities to establish testing corners and provide same-day results.

Integration of CT services within TB and STI services is on-going, using the opt-out strategy, with emphasis to provide CT services within the TB rooms by creating 'testing corners' where feasible. In some health centers, where TB corners are located in an open area, the lack of auditory and/or visual privacy has made it impossible to establish testing corners. In these cases, TB patients are counseled and tested from the general CT rooms. ZPCT is mentoring counselors on providing and recording these services. To support this TB/HIV linkage, HCWs working in the TB units are being included in counseling and testing trainings.

In an effort to improve the quality of CT services being provided, the QA/QI tools (completed last quarter) are now being used in most of the ZPCT-supported facilities. In addition, counselors' support meetings have been initiated in facilities to provide a forum for counselors to share experiences, discuss ways of managing stress and burn-out, difficult situations, and addressing other issues as a group. ZPCT provides technical and limited financial support in this area. In addition, ZPCT has produced and continues to distribute CT job aids to health facilities to assist with quality service provision.

Linkages of all HIV positive clients to ART, family planning and other care/support services have been improved in the 85 ZPCT-supported facilities with CT services.



#### 4.2.1.3 National Level Activities in CT

ZPCT continued to participate on the CT/Community-Home Based Care Technical Working Group (TWG) of the NAC. In addition, ZPCT continues to collaborate and participate in a variety of partner meetings relating to CT:

- Consensus Meeting to Revise the National HIV Testing Algorithm (August 9, 2006): At the meeting, it was recommended that the national testing algorithm be revised to replace the Genie II with the Unigold, which does not require a cold chain and is simpler to use. For the tie-breaker, it was recommended that Bionor be replaced with Bioline, also due to its simplicity in use. These recommendations will be presented to the MOH.
- Participation on the Prevention of Sexually Transmitted Infections TWG (August 17 and September 4, 2006): These meetings were in preparation for the National Consultative Meeting on Male Circumcision (MC) in September.
- NAC meeting on HIV testing by non-HCWs (August 31, 2006): The recommendation during this meeting was to pilot this training of lay counselors in HIV testing at selected health facilities, and provide supervision for testing following the training.
- Stakeholders' Consensus Meeting on QA tools at MOH (September 1, 2006): ZPCT presented the CT QA tools which were well received. Minor revisions are being incorporated.
- National Consultative Meeting on Male Circumcision (September 11-12, 2006): At this meeting, it was agreed that the MOH/NAC should prepare for the increased demand for MC services. In addition, it was stressed that MC be considered as part of a package of existing preventive strategies, rather than a stand-alone intervention.

Other activities that ZPCT-supported during this quarter were:

- Production of refresher training materials for CT: ZPCT adapted training materials for refresher CT, based on modules from the basic CT course, lessons learnt from implementation and gaps identified during technical support visits to health facilities. These training materials are being used for the CT refresher trainings organized by ZPCT.
- Prevention in Care Setting Pilot Workshop (September 6-12, 2006): A five-day training workshop was conducted in Kabwe, Central Province to update 12 HCWs from six ZPCT-supported facilities on identifying and building upon opportunities for HIV prevention within health facilities. These HCWs had clinical and supervisory responsibilities at their respective sites and most were trained in CT. FHI's draft *Guide for the Integration of HIV Prevention in the Care Setting*, including field testing tools was pre-tested in the workshop and in health facilities during this week. The workshop participants tested the *Guide's* tools for assessing existing prevention activities and staff competency in prevention at their respective facilities and reported on their findings. Drawing upon the facility-based experiences, they participated in revising the tools and the dialogues on prevention drafted for clinicians working in specific clinical areas (e.g., ART Clinic, ANC, STI Clinic, etc.). This workshop emphasized the need to integrate prevention messages and activities in all service areas.
- Mobile CT meeting (September 14 & 15, 2006): ZPCT provincial staff from three provinces (Central, Northern and North Western) met in Lusaka to develop a strategy and plan to pilot mobile CT activities. Mobile CT activities will be implemented on a pilot basis in three districts in the next quarter.

#### 4.2.1.4 Key Issues/Constraints in CT Service Provision

Some of the challenges identified in earlier quarters that continue to be encountered include:

- Limited human resources: This remains a challenge. ZPCT is addressing this issue by training additional existing staff in the facilities to provide CT services, as well as training lay counselors to supplement HCWs. ZPCT has now operationalized provision of limited support for transportation to HCWs working extra shifts for CT.
- Inadequate space for CT: ZPCT is addressing this issue with technical assistance in patient flow and linkages, and limited infrastructural refurbishments.
- Occasional stock-outs of HIV test kits and supplies have continued to contribute to interruptions and delays in service provision in health facilities.

## **4.2.2 Prevention of Mother-to-Child Transmission (PMTCT) of HIV**

Eighty four of the 85 health facilities targeted for ZPCT assistance in provision of PMTCT services are providing PMTCT services.

### **4.2.2.1 PMTCT Training**

During this reporting period, 85 health care workers were trained in PMTCT in four two-week courses. In addition to the two-week courses, ZPCT-supported one five-day refresher training in PMTCT for 21 health care workers from three districts in Copperbelt Province. This training was tailored specifically for those HCWs who were trained in PMTCT previously under curricula that did not emphasize HIV testing skills, ART prophylaxis, or treatment. A similar training is planned for HCWs in Kabwe in the next quarter. In total, ZPCT has trained 354 HCWs in PMTCT.

### **4.2.2.2 PMTCT Services**

By the end of this reporting period, services were being provided in 84 of the 85 ZPCT-supported facilities targeted for PMTCT, including four health facilities covered under new agreements.

Through technical support from ZPCT, including intensive mentoring of PMTCT providers, routine CT within ANC using the national opt-out strategy is now implemented at all Phase 1 and Phase 2 PMTCT sites. By the end of this quarter, over 94% of all women attending ANC in ZPCT-support facilities were provided with routine testing as part of their antenatal care, compared with the baseline 24% at the start of the program in May 2005. In the next quarter, ZPCT will provide technical support to an additional five health facilities on implementing the opt-out approach.

Mentoring the trained PMTCT providers in HIV testing skills has also contributed to ensuring same-day testing and results within the ANC. As a result, nearly 100% of pregnant women tested received their results in September 2006. Almost all ZPCT-supported facilities provide same-day test results, although this is sometimes disrupted when staff shortages arise. CT services have also been extended to the labor and delivery wards for women who may not have been tested during the antenatal period.

ZPCT continues to provide technical assistance and mentorship to HCWs to strengthen linkages of all HIV positive women under PMTCT to follow-up care and treatment services. This has further been improved with the introduction of the sample referral system. All pregnant women testing HIV positive are immediately assessed for ART eligibility, including drawing of a sample for CD4 testing, and referred accordingly. Technical assistance on linkages to family planning services, an important component of PMTCT, is also being provided.

In Luapula Province, male involvement in PMTCT has continued to improve. This quarter, 560 couples were provided with CT services within PMTCT, compared to 38 couples one year ago (July to September 2005). This increase in male involvement was achieved in collaboration with the Health Communication Partnership (HCP).

### **4.2.2.3 National Level Activities in PMTCT**

ZPCT continued to participate on national committees on PMTCT at MOH as well as the PMTCT Technical Working Group of the NAC. During this quarter, ZPCT participated in the following national level activities:

- Consensus Meeting on Revisions to Under-5 Card (August 8, 2006): The meeting was aimed at including HIV information on the under-five card to facilitate identification of HIV exposed infants and provision of necessary care, including cotrimoxazole prophylaxis and HIV testing at the appropriate age.
- Meeting to Review PMTCT and Pediatric HIV Care Indicators (September 13-14, 2006): At this stakeholder's meeting, indicators were reviewed, and a plan developed for piloting implementation of these indicators at selected sites.
- Meeting to Revise Supervisory Tools (September 19, 2006): Supervisory tools for reproductive health were reviewed, to incorporate PMTCT issues.
- Meeting to Plan MOH National Scale-Up for PMTCT (July 2006): As a follow-up on the recommendations of the Joint PMTCT mission, the stakeholders met to plan the scale-up of the different components of PMTCT.

#### 4.2.2.4 Key Issues/Constraints in PMTCT Service Provision

The following challenges continue to affect smooth provision of PMTCT services:

- Human resources: Staff shortages have persisted and have been coupled with high staff turn-over through rotation, transfers, retirements and death. However, ZPCT is working with DHMTs/PHOs to continue providing limited support for transport reimbursements for off-duty facility staff who work extra shifts to provide services.
- Outreach PMTCT services: PMTCT services have not been incorporated into all outreach ANC services. As a result, women in more hard-to-reach areas have not been reached with PMTCT services.
- Occasional stock-outs of HIV test kits and supplies have continued to contribute to interruptions and delays in service provision in health facilities.

#### 4.2.3 Antiretroviral Therapy (ART)

During this quarter, ZPCT has provided support to 39 ART centers with ongoing services, as well as providing technical assistance to an additional 11 health facilities to initiate ART services in the next quarter, resulting in a total of 29 static and 21 outreach sites in 25 districts.

##### 4.2.3.1 ART Training

During this quarter, ZPCT has trained 70 HCWs (including doctors, clinical officers, nurses, pharmacy technologists and technicians, and laboratory technicians and technologists) in ART/OI management. An additional 82 HCWs were trained in pediatric HIV/AIDS management and 10 HCWs in adherence counseling. The breakdown is as follows:

- 30 HCWs from Kitwe Central Hospital, Copperbelt Province in ART/OI, participated in an in-house training.
- 16 HCWs from Mansa General Hospital and Mansa DHMT in ART/OI, participated in an in-house training.
- 24 HCWs from 13 new ART sites (initiated with ART Plus-Up funding) were trained in a 10-day comprehensive ART/OI course.
- 57 HCWs from Northern Province participated in a 3-day pediatric HIV/AIDS management training.
- 25 HCWs from Copperbelt Province and 9 ZPCT technical staff participated in a 5-day comprehensive pediatric HIV/AIDS Care training.
- 10 HCWs from Luapula Province were trained in a 2-day adherence counseling training.

In addition, ZPCT conducted two 10-day adherence counseling training sessions for 50 community members from all five ZPCT-supported provinces, bringing the total number of ART adherence support workers (ASWs) to 172.

##### 4.2.3.2 ART Services

ZPCT staff continued to conduct technical assistance visits to the 39 established ART sites and 11 newly selected ART sites during this quarter. Assistance continues to focus on strengthening the internal referral systems from outpatient departments, TB and STI clinics to CT and onwards to clinical care and ART, as well as initiation of ART services at new sites.

In sites where pediatric ART/OI trainings have been conducted, ZPCT provincial staff continue to conduct follow-up visits to strengthen the services and ensure that more children have access to HIV care and ART.

QA/QI tools were implemented at each ZPCT-supported ART site this quarter, and facility staff were involved in the exercise. In the next quarter, ZPCT will involve the DHMTs in these assessments. Overall, information gathered with the tools indicate that, despite the human resource problem and occasional stock-outs of laboratory supplies, the quality of service and care is improving. ZPCT staff continue to work with HCWs to assist and encourage them in improving documentation of adverse drug reactions.

ART services at Chipulukusu Health Center began in July, once the DHMT identified a medical officer to provide outreach services at the facility. The sample referral system to Ndola Central Hospital for CD4 counts has been established, while the facility conducts hematology and chemistry tests on-site.

ZPCT continues to focus on the issues outlined below:

- Outreach ART services: ZPCT continues to introduce and expand outreach ART services in order to increase access to patients. This quarter, ZPCT executed agreements and amendments to extend ART services to ten more ART outreach sites. ZPCT provincial teams are working closely with the health facilities and the respective DHMTs to carry out identified refurbishments, procure furniture and equipment, and train HCWs and ASWs to support these services. ART outreach services play an increasingly important role in serving ART clients. In May 2005, 5% of ART clients at ZPCT-supported sites accessed ART through outreach services. This percentage had increased to 16% by the end of this reporting period. Outreach sites currently account for over 25% of new clients put on treatment.
- Collaboration with home-based care (HBC) programs: This quarter, ZPCT signed a memorandum of understanding with the Ndola Catholic Diocese to provide outreach ART services at three home-based care centers (Chishilano in Ndola, Twatasha Trakk in Kitwe, and Iseni in Chingola) under the Catholic Integrated AIDS Program. These home-based care centers will be linked to the nearest ZPCT-supported ART site for services, and data will be reported through that site. ZPCT has met with each of the three DHMTs to form an outreach team and develop a routine schedule. Services will begin in the next quarter.
- Pediatric HIV/AIDS: To date, 141 HCWs have been trained in Pediatric HIV/AIDS management. By end of September 2006, 1597 children were receiving ART in the ZPCT sites compared to the 443 children who were receiving ART by the end June 2005 in the five ZPCT-supported provinces.
- Adherence counseling for ART clients continues to be strengthened with the training of more HCWs in adherence counseling, training of community members as adherence support workers in all ZPCT-supported provinces. Two to three ASWs, have been placed at established ZPCT-supported ART sites, and a similar number have been trained and will be assigned to the new ART sites in the upcoming quarter. ASWs work two days in the facility under the supervision of the HCWs and spend another day in the community to follow-up on ART clients that miss appointments.
- ART data collection and data quality: In addition to the 38 data entry clerks deployed by the end of the reporting period, computers have been procured and distributed to the ART sites. The National Patient Tracking System has been finalized and will be piloted in several ZPCT sites. ZPCT will be recruiting data entry clerks for the new ART sites.
- Provision of reference materials: In this quarter ZPCT began the review of the ART job aids to revise them in line with the new WHO Guidelines. Revised job aids will be printed and distributed in the next quarter. ZPCT has acquired (from MoH) the newly developed National Training Package for Comprehensive Pediatric HIV/AIDS Care. ZPCT pre-tested this training package and will provide feedback to the MOH for revisions.
- ART Plus-Up Funds: During this quarter, recipient agreements were developed and existing agreements amended to initiate support for ART services in 13 health facilities. These are: Roan Antelope Hospital in Luanshya, Ronald Ross General Hospital in Mufulira (Copperbelt Province), and Mufumbwe District Hospital in North Western Province, Ipusukilo Health Center (Kitwe), Makululu, Pollen and Kasanda Health Centers (Kabwe), Masansa Health Center (Mkushi), Location Health Center (Kasama), Senama Health Center (Mansa), Samfya Health Center (Samfya), and St. Dorothy RHC and Solwezi Urban Clinic (Solwezi). Plans were also developed and support begun to establish a comprehensive HIV/AIDS center at Kitwe Central Hospital, and a comprehensive family care center and PCR laboratory at Arthur Davison Children's Hospital.

#### **4.2.3.3 National Level Activities in ART**

During this quarter, ZPCT staff participated in the following meetings:

- Patient Tracking System (PTS), CIDRZ Office (July 10, 2006). Meeting with MOH and partner representatives to finalize initial and follow-up visit forms for PTS.
- MOH ART Meeting, Blue Crest (July 11, 2006). Meeting to review and advise on regimen choices for national program.

- Global Fund to fight AIDS, TB and Malaria; Round 6 Proposal Development Meeting. Mulungushi International Conference Center (July 20, 2006).
- Meeting with Dr. Nathan Tumwesigye, African Network for the Care of Children Affected by AIDS (ANECCA) (July 2006). ZPCT DTS and clinical staff met with Dr. Tumwesigye to organize a 5-day pediatric training in Kitwe in September. The training was to target doctors, clinical officers, nurses and pharmacy technologists/technicians who had already received training in management of antiretroviral therapy and opportunistic infections.
- CRS ART Communication Strategy (July 31, 2006). Partners met to review findings from a CRS needs assessment on developing an ART communication strategy.
- Planning for Comprehensive Pediatric HIV/AIDS Care Training, MOH at Longacres Lodge (August 31, 2006). The Ministry of Health, ZPCT and ANECCA had already planned for the pilot training in Kitwe (described above). During this meeting planning for the subsequent trainings in the rest of the provinces in the country was initiated.
- NAC Treatment, Care and Support Technical Working Group (September 12, 2006): The TWG met to review the draft PEPFAR Zambia Country Operating Plan (COP) for 2007.
- ZPCT staff met with Child Health Care Specialist at the MOH to provide an update on ZPCT's activities in pediatric HIV care and ART.

#### **4.2.3.4 Key Issues/Constraints**

The following constraints were faced in ART service provision:

- Inadequate laboratory equipment and erratic supply of reagents for HIV testing and monitoring of clients on ART. Due to the break down of some laboratory equipment (e.g. Facscount machines), there have been disruptions in the delivery of quality ART services. The sample referral systems are in place at most ART sites, though there are still issues of transportation of samples in some sites that need attention.
- Limited human resources, particularly medical officers, hampers provision of ART services. ZPCT continues to provide transport reimbursements for extra shifts for the HCWs at health facilities, as well as to support travel of medical officers, pharmacy and laboratory staff to health facilities to provide outreach ART services.
- Pediatric ART Challenges: Very few children are on ART due to the clinicians' lack of knowledge and confidence in the management of pediatric cases. ZPCT continues to train HCWs in the management of pediatric HIV/AIDS cases and ensuring the supply of pediatric formulations in ART sites. ZPCT also continues to strengthen the follow up of babies born to HIV positive mothers.

#### **4.2.4 Clinical Palliative Care**

ZPCT is working with staff at 86 facilities to strengthen and improve palliative care for PLHAs.

##### **4.2.4.1 Clinical Palliative Care Training**

The national training curriculum for ART and OI management is combined. A description of this training is included in the previous section (4.2.3.1). As reported, 70 HCWs participated in ZPCT-supported ART/OI management training during this quarter, bringing the total to 478 HCWs trained to date.

##### **4.2.4.2 Clinical Palliative Care Services**

ZPCT Lusaka and provincial office staff have provided technical assistance in clinical care to the 86 sites in the five provinces. During the quarter under review, the provincial clinical care staff continue to focus on the following:

- Mentorship and supervision in the management of opportunistic infections, management of pediatric HIV/AIDS cases, and identification and documentation of adverse drug reactions;
- Strengthening of diagnostic counseling and testing;
- Continued strengthening of internal referral systems between OPD, IPD, TB corners and STI clinics to CT and eventually to Clinical Care and ART.

#### **4.2.4.3 National Level Activities in Clinical Palliative Care**

ZPCT staff continue to work with the NAC Treatment, Care and Support Technical Working Group (described in section 4.2.3.3).

ZPCT remains an active member of the Palliative Care Forum (PCF) led by USAID and the Palliative Care Association of Zambia.

ZPCT staff actively participated in the following meetings during this quarter:

- Pediatric Palliative Care (CRS, July 26, 2006)
- TB-HIV Coordinating Committee Meeting (Blue Crest, July 27, 2006)

#### **4.2.4.4 Key Issues/Constraints**

- Referral linkages have continued to improve in the last quarter and ZPCT will continue to work with facilities to strengthen links between CT, post-PMTCT, TB, STI, under-five and clinical care services. In this quarter, technical assistance to health facility staff emphasized diagnostic counseling and testing, especially for pediatric patients.
- Erratic supply of drugs for OI management: This issue will be improved with the awaited procurement of drugs through the Global Fund Round 4 with the help of JSI/DELIVER. ZPCT will ensure that when these drugs are available at MSL they will reach the ZPCT facilities.
- Limitations of facility-based palliative care. Although palliative care is an important part of the continuum of care, the facility's role is rather limited. ZPCT recognizes this and, while strengthening services within the clinics, linkages with other organizations and partners engaged in palliative care and quality of life are being forged. Directories of services developed will enable easy referral for the continuum of care for PLHAs.

### **4.2.5 Pharmacy Services**

ZPCT is continuing to provide a combination of needed improvements to basic infrastructure and equipment for pharmacy services at 43 Phase 1 facilities and 39 Phase 2 health facilities.

Activities have been initiated at five additional health facilities supported through ART Plus-Up funding. Support will include provision of basic pharmacy equipment/furniture and renovations to enhance pharmaceutical service delivery.

#### **4.2.5.1 Pharmacy Training**

ZPCT did not conduct any pharmacy training this quarter, but concentrated on follow-up with health facility staff to assess how implementation is progressing. An outline of this is presented in the section below on technical assistance.

#### **4.2.5.2 Technical Assistance in Pharmacy**

ZPCT continued to provide technical support on the use of the updated ARTServ Dispensing Tool at the 20 sites using the tool. Once the remaining ART sites receive a computer set for pharmacy (as outlined in the recipient agreements), the ARTServ tool will be installed and pharmacy staff oriented on its use. The tool is working well with few problems noted. Problems due to human error are being addressed through ongoing mentoring and technical support, as well as training additional staff (where available) on the use of the tool so that staff can rotate and reduce workload.

Technical assistance visits were conducted to strengthen commodity management information systems in facilities offering ART services. Guidance was provided on how to improve stores management including stock status update, storage space and conditions, timely ordering and collection, aggregation and proper use of consumption data of commodities. To facilitate effective commodity management, ZPCT developed and introduced a commodity inventory tracking tool to assist in inventory control and tracking of commodities procured by ZPCT.

Technical assistance was also provided to address non-submission of returns and data, which contribute to shortages of critical supplies and stock-outs.

#### **4.2.5.3 Guidelines and SOPs**

ZPCT continues to distribute and promote the use of the Zambia ART Pharmacy SOPs to the facilities, and focuses technical assistance to the sites to ensure that work is being done according to the guidelines and SOPs. ZPCT facilitates the site specific adaptation of these SOPs in line with GRZ policy. This quarter, site specific adaptations were completed at five health facilities in Central Province, bringing the total to 12 sites. The process has been reviewed and the site specific adaptations for the remaining ART facilities are ongoing.

The revised pharmacy services QA/QI tools were administered at 32 sites in Central, Copperbelt, Northern and North Western Provinces. Implementation of the tools plays a key role in continually monitoring the quality and sustainability of services, as well as building capacity within health facilities and DHMTs.

#### **4.2.5.4 National Level Activities in Pharmacy Services**

ZPCT staff is actively engaged in a range of issues and discussions at the national level. Participation in national meetings and workshops ensures ZPCT input into national activities and continued collaboration with the MOH and other partners. Meetings and workshops during this quarter included:

- ARV and HIV Test Kit Logistics Systems Stakeholders Meeting (August 24, 2006 at Taj Padmozi Hotel): This meeting was held to ensure that all NGO stakeholders understand and adopt the new logistics systems for ARV and HIV test kits, and to solicit the involvement of the NGOs in the training roll out for the two logistics systems.
- Ministry of Health ARV Logistics Systems Trainer of Trainers Workshop (September 3-16, 2006 in Siavonga): Participants were trained as trainers, including the ZPCT ARV, Drugs & Supplies Technical Officer, in the new ARV logistics system, including introduction to the forms to be used in the system. Focal persons dealing with HIV-related commodities at provincial, district and facility level will be trained during October to December, 2006. The goal of the trainings is to introduce the new national logistics system and, ultimately, collection of consumption data by the end of December 2006.

#### **4.2.5.5 Key Issues/Constraints in Pharmacy Services**

The ZPCT is committed to working with our partners in the provinces, districts, and facilities to ensure an adequate supply of HIV-related commodities for provision of services. There are many challenges in meeting this goal.

- Medical Stores Limited logistics constraints: Occasional lapses in the transport system at MSL have led to requests to ZPCT to assist in transporting critical supplies to support sites. This is only possible when there is pre-arranged travel to these destination sites. ZPCT is constantly working with facility staff to ensure that orders are submitted according to the delivery schedule requirements that MSL has issued.
- Lack of qualified staff in the facilities: Shortages of trained staff greatly compromise the quality of service delivery in the facilities. ZPCT is working with DHMTs and facilities to improve this situation through implementation of the transport reimbursement system for staff working extra shifts.
- Inadequate supply of commodities: The erratic supply of commodities affects service delivery across all elements of care. ZPCT employs multiple strategies, including training and technical assistance, to ensure an uninterrupted supply of essential commodities. Also by actively participating in national level forecasting and quantification activities, ZPCT ensures that the facilities' needs are taken into account.
- Storage space: As ART services expand, the need increases for space in pharmacies to store ARVs and other commodities under proper storage conditions. ZPCT assists through minor refurbishments to facilities, such as adding shelves, air conditioners and other improvements.

#### **4.2.6 Laboratory Services**

ZPCT is strengthening laboratory services at 68 facilities through renovations and procurement of equipment. This includes the technical assistance provided to support laboratory needs at additional ART sites (both static and outreach) added with ART Plus-Up funding.

#### **4.2.6.1 Laboratory Training**

ZPCT did not conduct any training in laboratory services this quarter, but concentrated on follow-up and mentorship of staff at health facilities (discussed in the technical assistance section).

#### **4.2.6.2 Technical Assistance**

ZPCT piloted the electronic Laboratory Management Information Systems (LMIS) tool (developed by MSH in partnership with CDC) at Ndola Central Hospital. Hospital staff were trained on-site in the use of the tool.

ZPCT provided technical support to improve commodity management systems for laboratory services at 12 health facilities in Copperbelt Province providing ART services. Technical assistance in storage, stock status and consumption of commodities was provided.

Laboratory services at both Serenje and Mkushi District Hospitals were affected due to unavailability of a laboratory technologist. ZPCT worked with the Serenje District Health Office (DHO) to hire a local retired laboratory technologist. The DHO will pay the salary for this position, and ZPCT will support transport reimbursements for three extra shifts per week. ZPCT staff oriented the new laboratory technologist on use of the CD4 Facscount machine.

ZPCT Lusaka office laboratory staff visited and checked on the functionality of the hematology and chemistry equipment at Serenje and Mkushi District Hospitals.

#### **4.2.6.3 Guidelines/SOPs**

ZPCT continues to distribute and promote the use of the Zambia ART Laboratory SOPs to the facilities. ZPCT facilitates the site specific adaptation of these SOPs in line with GRZ policy. This quarter, site specific adaptations were completed at three additional ART sites in Northern Province. Lessons learned from this process will be shared with other provinces, and applied to the site specific adaptations in the upcoming quarters.

This quarter, the QA/QI tools for laboratory were implemented in 57 health facilities. When the services at the remaining 11 facilities are fully functional, the QA/QI tools will be introduced. A recurrent issue is the critical shortage of trained laboratory technologists in nearly all health facility laboratories. The QA/QI tools will continue to be implemented in all health facilities, and the findings will be shared with the DHMTs to identify ways to improve services.

#### **4.2.6.4 Specimen Referral System**

A specimen referral system was developed and initiated to provide off-site support to facilities with weak laboratory capacity, for fast, efficient and effective quality laboratory services as close to the client as possible. ZPCT worked with districts to map out and zone the health facilities to ensure the provision of complementary quality laboratory services at all facilities regardless of location. The specimen referral system, with an initial focus on CD4 count testing for PMTCT clients, is functional at 48 health facilities in 20 districts. ART sites without CD4 equipment (primarily the outreach sites), also refer specimens to the nearest facility with CD4 test capability. The referral system at Mkushi has been disrupted due to absence of a laboratory person at Serenje District Hospital.

During this quarter, specimen referral was initiated at four health facilities in Solwezi, Mwinilunga and Kabompo Districts in North Western Province. In the next quarter, the specimen referral system will be set-up in Zambezi and Mufumbwe Districts, as well as Mapunga and Mutanda Health Centers in Solwezi District.

#### **4.2.6.5 Procurement**

Results of an earlier ZPCT assessment to determine causes of the general and widespread shortage of reagents for HIV-related laboratory tests found that inadequate or the complete lack of stocks at MSL was the main cause of the problem. ZPCT undertook to procure selected commodities to supplement supplies for the five partnership provinces. A summary of this quarter's activity is provided below:



- Procurement and distribution of laboratory reagents: Initial stocks of Facscount, hematology and chemistry reagents procured by ZPCT are being provided to ZPCT-supported facilities through the MSL. Re-supply is based on consumption, with orders for the commodities through MSL places with regular orders for other supplies. ZPCT continued to coordinate the distribution from the MSL of Facscount and Vitros DT 60 reagents procured by ZPCT earlier in the year. New consignments received and distributed include:
  - **Reagents for Sysmex pochHi-100:** Reagents and controls were received from CDC through their vendor Biogroup for distribution to 11 ZPCT sites.
  - **Reagents for Olympus AU400:** These reagents were received in August 2006 and immediately transferred to MSL for storage and distribution to ZPCT-supported sites.
  - **Reagents for ABX Micros 60:** These reagents were received in August 2006 and immediately transferred to MSL for storage and distribution to ZPCT supported sites.
- Distribution of laboratory consumables: A key constraint identified in the implementation of the specimen referral system is the inadequate supply of laboratory consumables, mainly specimen containers. To address this problem, ZPCT procured 25,000 EDTA vacutainers to be used for CD4 count last quarter. The remaining 10,000 of these containers have been distributed to the five ZPCT provincial offices for onward distribution to the facilities implementing specimen referral on the basis of their consumption rates.
- Procurement and installation of laboratory equipment: During the last quarter, ZPCT procured 29 autoclaves for use in selected sites. All but one of these autoclaves have been installed at the health facilities, and staff trained in use and maintenance.
 

ZPCT is identifying a local agent to install six centrifuges and six electronic balances procured last quarter.

Seven of the eight chemistry analyzers (Humalyzer 2000) procured last quarter, have been installed at health facilities in Copperbelt, Northern and Luapula provinces. The eighth Humalyzer will be delivered to Chitambo Mission Hospital once the DHMT identifies a laboratory technologist for the facility.

Seven hematology analyzers (ABX Micros 60) were procured, installed and laboratory staff trained in use and maintenance by the Scientific Group (SG). In addition, five Sysmex pochH hematology analyzers were installed in Copperbelt Province in August 2006.
- Laboratory Equipment Maintenance: The Scientific Group (SG) has agreed to calibrate and maintain selected laboratory equipment (ABX Micros 60 and Pentra, Olympus AU400, Nova pHox, and Vitros DT60) in ZPCT-supported sites if all reagents are procured through SG. The service contract will not include repairs resulting from user-negligence and replacement of parts. This model is based on the maintenance package negotiated through Clinton Foundation with Becton Dickinson for the Facscount and Facscaliber.

#### **4.2.6.6 National Level Activities in Laboratory Services**

ZPCT staff continues to be actively engaged in a range of issues and discussions at the national level, including collaboration with the MOH and CDC on harmonization of training plans for laboratory services. Issues of quality assurance and quality improvement are also being dealt with continuously. Meetings are ongoing with representatives from ZPCT, MOH, and CDC on these issues.

In addition, ZPCT staff continues to collaborate with Clinton Foundation representatives in their planning assistance activities to the MOH. Information is provided to ensure that ZPCT support to GRZ sites is noted and considered in planning.

Participation in national meetings and workshops ensures ZPCT input into national activities and continued collaboration with the MOH and other partners. Continuing on from last quarter, various meetings of the Strengthening Laboratory Services National TWG were held this quarter. In addition, ZPCT participated in a 5-day meeting of the Laboratory Procurement and Logistics National Subcommittee (September 11-15, 2006). The subcommittee met to discuss and plan for the forthcoming quantification workshop and progress on the in coming reagents and available budgets from partners.

A follow-up laboratory quantification workshop took place with JSI/DELIVER leading the team. All partners attended including the Ministry of Health and Defense Medical Services. Data used in this workshop came from ZPCT-supported sites. A list of reagents was identified against each test profile for all levels of care.

#### **4.2.6.7 Key Issues/Constraints**

ZPCT is committed to working with our partners in the provinces, districts, and facilities to ensure an adequate supply of HIV and ART-related commodities for provision of services. There are many challenges in meeting this goal.

- Late submission of aggregated data: Submission of aggregated HIV-related commodities (HIV rapid test kits) data from DHMTs to central level continues to be a challenge due to non-submission of data from sites that ZPCT does not support. This delays the re-supply of these commodities as this is linked to district-level data submission. Stock-outs have reduced but are still experienced at some facilities, hindering service provision. ZPCT is working with DHMTs to build capacity at their level and eventually we hope this will reduce the delays.
- Lack of qualified staff in the facilities: Shortages of trained staff compromises the quality of service delivery in the facilities. ZPCT is working with DHMTs and facilities to improve this situation by providing transport reimbursements to staff who work extra shifts.
- Inadequate supply of commodities: The erratic supply of commodities greatly compromises service delivery across all elements of care. ZPCT is employing multiple strategies, including procurement of reagents, training and technical assistance, to address this. ZPCT staff also actively participates in national level forecasting and quantification activities. ZPCT Provincial Pharmacy/Laboratory Technical Officers work closely with staff at the point of care level to ensure timely ordering of reagents to avoid stock outs.
- Maintenance of diagnostic equipment: Routine preventive maintenance of diagnostic equipment is an issue in assuring uninterrupted laboratory testing in the facilities. ZPCT is collaborating with the MOH and CDC to address this problem. Vendors such as SG and BD continue to service the equipments and retrain the users.
- Specimen referral systems: Challenges also exist in implementing the recently initiated specimen referral system set up by ZPCT. The motorbikes provided by ZPCT are intended for data collection and specimen transport. District Health Information Officers (DHIOs) have custody of the motorbikes, and often prioritize data collection over specimen referral. Additional motorbikes have been transported to the ZPCT provincial offices and will be distributed to facilities early in the next quarter.

### **4.2.7 Monitoring and Evaluation (M&E)**

#### **4.2.7.1 M&E Training**

In this reporting period, M&E topics were presented as part of CT, PMTCT and ART training session for HCWs. Details of these trainings are as follows:

- The M&E module was presented as part of the CT training for 59 staff from 40 ZPCT-supported sites.
- 85 staff from 57 ZPCT-supported facilities were trained in PMTCT reporting as part of four PMTCT courses. This training involved the use of the Integrated VCT/PMTCT Register and associated monthly reporting forms. These trainings covered Central, Copperbelt, Luapula and Northern Provinces.
- 24 health care workers from 14 sites were trained in ARTIS (under the ART/OI technical area).

#### **4.2.7.2 Technical Assistance in M&E**

As an ongoing process, ZPCT staff provided technical assistance to the ZPCT-supported facilities and districts on updating of the pre-ART and ART registers, VCT-PMTCT database at DHMTs and use of the ARV dispensing tool in pharmacies at ART sites. In addition, ZPCT M&E staff provided on-site technical support and mentorship to laboratory and pharmacy staff at health facilities in all the five ZPCT-supported provinces

This quarter, a data audit was conducted in all provinces for the April to June 2006 period, and the report finalized. The audit process and results, showed a high level of data reliability. There were

marginal inconsistencies in the data which were accounted for by facility staff mistakenly updating the data after the end of the reporting period; this continues to be a focus of technical assistance. Overall, results show a significant improvement in the quality of data.

The revision of the ZPCT procedures manual to guide data collection was undertaken during the quarter. The manual will be aligned with the merging government-endorsed Patient Tracking System, Continuity of Care Patient Tracking System (CCPTS). This process is still ongoing since the CCPTS is not yet finalized.

In collaboration with the respective PHO/DHMT staff, ZPCT provided further technical assistance to all provinces in the area of data management at facility level, through mentorship. The focus of the site visits included working with the PHO and DHMTs to strengthen data collection on the TB linkage to CT in all ZPCT-supported facilities.

#### **4.2.7.3 National Level Activities in M&E**

ZPCT participated in the following national level M&E activities this quarter:

- ZPCT piloted and reviewed the laboratory MIS at Ndola Central Hospital.
- ZPCT reviewed the final version of the PTS forms to be piloted within the next few months at selected sites. The review was in collaboration with MOH, CRS, CIDRZ, CHAZ, and CDC
- During the quarter, ZPCT staff participated in planning for the roll out of the CCPTS to ZPCT - supported health facilities on a pilot basis in up to 10 sites. The roll out is planned for November 2006 once the software is modified to suit the revised forms. Following two months of operation, the PTS will be fully rolled out at all ZPCT-supported ART sites. ZPCT is collaborating with MOH, CRS, CIDRZ, CHAZ, and CDC on this initiative.
- ZPCT (in collaboration with CDC, MOH and HSSP) has continued its participation in the integration of PMTCT, CT and ART into the national health management information system (HMIS).

#### **4.2.7.4 Key Issues/Constraints**

- Transition from ARTIS to CCPTS: The pending transformation of the HIV data collection and reporting systems from ARTIS to CCPTS has caused problems in the continuous supply of essential forms and other data collection tools. Partners are not procuring these forms and tools consistently in anticipation of the said transition.
- Labor intensiveness of data audits: Due to the increase in the number of ZPCT-supported sites, it has become increasingly labor-intensive and expensive to conduct the quarterly data audit at all facilities. To address this issue, while maintaining data reliability and accuracy, the audit is now conducted on sample basis (a combination of random and purposive sampling).

#### **4.2.7.5 ZPCT Indicators/Results**

The following table shows service statistics and related data for the period July 1 to September 30, 2006 from ZPCT-supported sites. It is a summary of key indicators for all ZPCT activities from all facilities. The training statistics for HCWs and lay counselors who directly provide services in all the program areas are also presented.

**Services in 86 Facilities Receiving ZPCT Support  
July – September 2006**

Indicator	Achievements May 1 2005 to September 30 2006						
	Workplan (Apr 06 to Mar 07)	Quarterly Achievements (1 Jul 06 to 30 Sept 06)			Achievement (Apr 06 to Sep 06)	Percent Achievement (Apr 06 to Sep 06)	Cumulative LOP Achievements (May 05 to Sept 06)
	TARGET	FEMALE	MALE	TOTAL			
<b>CT</b>							
Service Outlets							85
Persons Trained in CT	402*			119	221	55%	601
Persons receive CT services	43,990	7,914	7,577	15,491	29,103	66%	62,361
<b>PMTCT</b>							
Service Outlets							84
Providers trained in PMTCT	200			106	106	53%	354
Pregnant women provided with PMTCT service, including CT	30,033	13,997		13,997	26,792	89%	53,597
Pregnant women provided with a complete course of ART prophylaxis	6,757	1,160		1,160	2,230	33%	4,093
<b>Basic Health Care and Support</b>							
Strengthen Facilities to provide clinical palliative care services							86
Service Outlets/programs providing general HIV-related palliative care							86
Persons provided OI management and/or prophylaxis		19,216	13,294	32,510			32,510
Persons provided with general HIV-related palliative care		19,216	13,294	32,510			32,510
Persons trained to provide general HIV- related care	100			70	95	95%	478
<b>Treatment</b>							
ART service outlets providing treatment							39
Health workers trained	100			70	95	95%	478
New clients for ART	13,686	2,545	1,731	4,276	8,904	65%	19,719
Persons receiving treatment	25,152	14,862	10,141	25,003	25,003	99%	25,003
<b>Pediatric Treatment</b>							
Health workers trained in pediatric care	150			82	141	94%	141
New pediatric clients for ART	395	112	136	248	542	137%	1,266
Pediatric patients receiving treatment	1,019	818	779	1,597	1,597	157%	1,597
<b>TB and Care</b>							
TB infected clients receiving CT services	3,333	564	547	1,111	1,902	57%	1,902
HIV-infected clients attending HIV care/treatment services that are receiving treatment for TB disease (new cases)	1,641	192	192	384	668	41%	668

\* Includes 30 couple counselors and 112 lay counselors.

### 4.3. Community Mobilization and Developing Referral Networks

In this quarter, the first Community Purchase Orders (CPOs) were executed. The CPO is a new mechanism to provide limited funding to existing community groups to mobilize community members to access HIV/AIDS services in ZPCT-supported facilities. CPOs were signed and activities are ongoing in four of the five ZPCT-supported provinces.

Progress was also made in planning and initiating pilot activities for mobile CT, an initiative designed to reach community members with CT before they are ill. With technical assistance from the FHI/Arlington Office, a meeting was convened with provincial CT/PMTCT officers and community mobilization and referral officers to develop draft mobile CT guidelines and standard operating procedures, and to design pilot mobile CT activities.

Referral network strengthening activities continue, with progress in establishing and documenting networks.

#### 4.3.1 Community Mobilization Program

The mobilization of communities to increase uptake of CT and PMTCT services within the catchment areas of ZPCT-supported facilities is ongoing in Central, Copperbelt, Northern and North Western Provinces. Progress in Luapula Province has been delayed with the departure of the Provincial Community Mobilization & Referral Officer; recruitment for a replacement is ongoing.

ZPCT continues to improve collaboration with other partners in the provinces. During this quarter, meetings were held with representatives of Health Communication Partnership and Society for Family Health to identify areas of collaboration and to clarify geographical areas of implementation to prevent duplication of activities. Collaboration also is ongoing with community stakeholders, as in the Northern Province, where meetings were held with traditional healers, leaders and PLHA support group members to provide orientation to the referral tools.

##### 4.3.1.1 Working with Local Community Groups

Provincial Community Mobilization & Referral Officers identified and worked with community groups to develop purchase orders to enable the groups to conduct community mobilization activities in communities surrounding ZPCT-supported facilities. During this quarter, 17 community purchase orders from six districts in four provinces were developed, reviewed, and signed. Mobilization activities funded through these CPOs include door to door mobilization, community meetings organized through community leadership, drama performances followed by discussion and documented referral to the health facility.

The following are the purchase orders reviewed and implementation commenced during the reporting period:

Province	District	Community Group	Health Facility
Central	Kabwe	PMTCT Community Motivators	Mahatma Gandhi Clinic
	Kabwe	Pollen Neighborhood Health Committee	Pollen Clinic
Copperbelt	Chingola	Chawama Neighborhood Health Committee	Chawama Clinic
	Chingola	Chiwempala Neighborhood Health Committee	Chiwempala Clinic
	Chingola	Kabundi Neighborhood Health Committee	Kabundi East Clinic
	Ndola	Chipokota Mayamba Neighborhood Health Committee	Chipokota Mayamba Clinic
	Ndola	Chipulukusu Neighborhood Health Committee	Chipulukusu Clinic
	Ndola	Kawama Neighborhood Health Committee	Kawama Clinic
	Ndola	Lubuto Neighborhood Health Committee	Lubuto Clinic
	Ndola	Mushili Neighborhood Health Committee	Mushili Clinic

Province	District	Community Group	Health Facility
	Ndola	Ndeke Neighborhood Health Committee	Ndeke Clinic
	Ndola	Nkwazi Neighborhood Health Committee	Nkwazi Clinic
Northern	Kasama	Kasama Youth Theatre Group	Location Urban Clinic
North Western	Kabompo	Mount Carmel Home-Based Care	Kabompo District Hospital
	Solwezi	Chachindende Theater Group	Solwezi Urban Clinic
	Solwezi	Chamwaza Theater Group	St Dorothy RHC
	Solwezi	Solwezi Neighborhood Health Committee	Solwezi Urban Clinic

Data from implementation of these CPOs will be reported next quarter.

#### Community Job Aids

ZPCT provincial teams recognized the need for appropriate materials, similar to the job aids developed to assist HCWs within facilities, but containing information at a level to and relevant for community groups in educating and informing community members about HIV/AIDS services. In response to this need, community job aids for CT and PMTCT were developed.

During this quarter, the community job aids were approved by Ministry of Health, printed and distributed to all ZPCT Provincial Offices. The job aids have been used during the orientation of community level partners as a tool to facilitate the dissemination of key messages around CT and PMTCT accurately.

#### **4.3.1.2 Associate Partners – Community Mobilization Activities**

##### Expanded Church Response (ECR)

During the reporting period, an amendment to the subagreement between ZPCT and ECR was developed collaboratively and signed. With this amendment, ECR activities in Kabwe District continue and were initiated in Chingola District. Under the revised scope of work, ECR's activities are more integrated into the ZPCT program, and are incorporated into the quarterly workplans developed by the ZPCT Central and Copperbelt provincial offices. Activities include the implementation of CT services in churches.

##### Churches Health Association of Zambia (CHAZ)

ZPCT collaboration with CHAZ, through a subagreement supporting four mission facilities, focuses on assistance with services within the facilities. ZPCT has been approached by St. Kalembe Rural Health Center to provide assistance, through a CPO, to the NHC affiliated with the clinic. This strategy for fostering community mobilization around mission facilities was endorsed by both groups and will be further pursued.

#### **4.3.1.3 Mobile Counseling and Testing**

During the reporting period, guidelines for the implementation of mobile CT were developed with technical assistance from the FHI/Arlington Office, and plans for a pilot program in three districts were developed. This is a joint initiative between the ZPCT Community Unit and the CT/PMTCT Unit.

Provincial Community Mobilization & Referral Officers and CT/PMTCT Officers from Central, Northern and North Western Provinces participated in a consultative meeting held at the ZPCT Lusaka Office (September 14-15, 2006). The goals of the meeting were to share experiences and lessons learned from mobile CT experiences in the provinces and, based on these, to build consensus on a model for implementation. For operational purposes, mobile CT was defined as CT services being offered in the community, also known as outreach CT.

Two models of mobile CT are currently being implemented. With the "stand alone" model of mobile CT, counseling and testing services are being offered in the community as the only service. With the second model, integrated CT, counseling and testing services are "piggy-backed" onto other ongoing or routine outreach services (e.g., child growth monitoring) being offered by health care workers. One district in each province was selected for a pilot of one or both of these models during the next quarter. All pilot activities will be carefully documented and results analyzed to

determine the cost-benefit of both approaches as a basis for future plans. Tentative plans (to be confirmed with DHMTs) are shown in the following table.

Province	District	Approach	Proposed Sites
Northern	Nakonde	<ul style="list-style-type: none"> <li>Stand-alone events</li> </ul>	<ul style="list-style-type: none"> <li>Four catchment areas of ZPCT-supported facilities: Mwenzo, Chilolwa, Waitwika and Nakonde Rural Health Centers</li> </ul>
North Western	Solwezi	<ul style="list-style-type: none"> <li>Integrated into outreach programs</li> <li>Stand-alone events</li> </ul>	<ul style="list-style-type: none"> <li>4 sites around St. Dorothy Rural Health Center</li> <li>Solwezi Urban Clinic catchment area</li> </ul>
Central	Kabwe	<ul style="list-style-type: none"> <li>Stand-alone events</li> </ul>	<ul style="list-style-type: none"> <li>Kasanda Market, Mukuyu Tree, Makululu</li> </ul>

Key next steps for implementation of the mobile CT pilot are outlined below.

At the Lusaka office level:

- Review and revise mobile CT guidelines and SOPs
- Develop guidance and tools (e.g., mobile CT observer tools)

At the provincial level:

- ZPCT provincial teams will hold consultative meetings with the DHMTs where pilots are proposed to discuss mobile CT and explore how support for these activities will be shared.
- Consultation with relevant district level partners such as HCP for the additional mobilization of communities, the District AIDS Coordination Advisor for transportation and Society for Family Health for possible collaboration.
- Convene a joint planning meeting between ZPCT and the DHMT to discuss resource mobilization and develop detailed implementation plans.
- Implement mobile CT, including community mobilization and documentation
- Review and evaluate pilot with partners to identify achievements, obstacles and lessons learnt.

#### **4.3.1.4 Lay Counselors Training and Placement**

During the reporting period, 22 lay counselors were trained from the Phase 2 districts of the Copperbelt Province. Thirty-three counselors in North Western and Northern Provinces are in their practicum period.

### **4.3.2 Referral Network Development**

#### **4.3.2.1 Status of District Referral Networks**

The ZPCT Provincial Office teams, led by the Provincial Community Mobilization and Referral Officers, have continued to provide technical assistance for strengthening and maintenance for district referral networks in nine districts. Referral Coordinating Units have been identified and referral network materials have been, or are being, developed and adopted. ZPCT is also working with districts and community groups on data collection and reporting for referrals. This has included orientation for staff in facilities that ZPCT supports and community groups on completion of standardized referral forms and documentation, and assistance with collection and compilation of data.

Acceptance and use of standardized referral tools is an important aspect of a cohesive and functioning referral system. The status of key documents in the nine districts is shown in the following table.

District	Referral Coordinating Unit	Referral Form & Register	Directory of Services	Operations Manual
Kabwe	Kabwe DHMT	Approved and in use	In use	Finalized. Awaiting resources for printing from network members
Mkushi	Mkushi DHMT	Approved and in use	Draft under review.	Draft under review.
Ndola	Ndola DHMT	Approved and in use	In use	Minor additions to be made
Chingola	Chingola DHMT	Approved and in use	Information being collected for draft	Draft being developed
Kasama	Kasama DHMT	Draft under final review.	Awaiting additional information from DHMT	Draft under review.
Nakonde	Nakonde DHMT	Draft under final review.	Information being collected for draft	Draft under review.
Solwezi	Solwezi DHMT	Approved and in use	Information being collected for draft	Draft under review by DATF
Kabompo	Kabompo DATF	Approved. To be distributed to network.	Information being collected for draft	Draft under review by DATF
Mansa	Mansa DATF	Drafted and awaiting approval.	Drafted and awaiting approval.	To be developed

#### 4.3.2.2 ZPCT Referral Network Meeting (September 18-19, 2006)

A two-day meeting was held (September 18-19, 2006) at the ZPCT Lusaka Office with Provincial Community Mobilization and Referral Officers to review progress in the development of referral networks. The meeting was co-facilitated by Leine Stuart (Senior Technical Officer for Clinical Care) from the FHI/Arlington Office.

Key issues identified and discussed included:

- Referral Documentation:
  - Network members in some districts have raised the issue of too many required tools. Participants agreed that the two most important tools are the referral forms and referral registers, and that these must be retained.
  - Some facility staff are not completing the referral form component for feedback. The data entry clerks will continue to work with staff to ensure that referral entry forms and registers are filled in correctly.
  - Completed feedback slips are not being collected from the health facilities by some organizations. ZPCT Officers will advise and work with the referral coordinating unit to build consensus among network members as to how this would be resolved. In one example given, Neighborhood Health Committee (NHC) members have been delivering feedback slips from the facility to community-based organizations.
- Resource Mobilization: As we move into districts further from the provincial centers, there are fewer active, well-funded HIV/AIDS service providers. In this context, resource mobilization is challenging. Government entities will be appealed to for resources such as transport to the referral network. One such structure is the District or Provincial AIDS Coordination Advisor (DACA or PACA), which in some instances has offered vehicles for use
- Expansion to Additional Districts: Prior to initiating activities in additional districts, activities within the nine districts where referral network committees have been established should be functioning at a certain level of independence. Ideally, referral coordinating units should be convening referral network membership meetings without the support of ZPCT, mobilizing resources through the network to update and reproduce referral tools (forms, registers, directory), and sustaining utilization of standardized referral tools.



- Data Collection: Challenges in collecting data on referrals continue. Specific steps, clearly delineating responsibilities, were outlined. The ZPCT provincial M&E officer or a data entry clerk will collect referral forms routinely, and aggregate the data to be submitted to ZPCT and partner organizations.

#### **4.3.3 Key Issues/Constraints for Community Mobilization and Referral Networks**

- Developing community purchase orders with local groups: Groups, such as NHCs, have little experience in developing documents such as CPOs, and the collaborative process is labor intensive and time consuming. To facilitate the process, ZPCT staff developed a checklist of straightforward questions to use with community groups in drafting CPOs. In addition to streamlining the process, this simple, collaborative approach should increase a group's capacity to write simple agreements for services.
- Capacity of health facilities to respond to increased needs triggered by community mobilization: As a result of community mobilization efforts, some facilities report difficulties in responding to increased work load. ZPCT is working with facilities to address this issue through several strategies: limited funding for extra shifts for HCWs, identifying specific days when facilities have extra staff for community referrals, and placement of lay counselors.
- Motivating community volunteers and lay counselors: ZPCT has recognized the commitment of Lay Counselors and Adherence Support Workers with the allocation of a limited transport reimbursement for volunteers who work a minimum of 2 – 4 shifts per week. Although ZPCT takes care to discuss plans for motivation with DHMTs and other partners, this system can be disruptive in places where other volunteers do not receive similar support. ZPCT will look for opportunities to address this issue more broadly with government and other partners who also face these issues.
- Support to the referral network coordinating units: Where ZPCT has taken an initiative to convene partners and assist in the strengthening of referral networks, the network members become dependent on ZPCT. It was re-emphasized during the Referral Officers meeting that the role of ZPCT, and the Referral Officers, is to strengthen the referral coordinating agency selected by network members to fulfill its coordinating function.

## 5. CHALLENGES

The ZPCT Partnership has a great opportunity to work with the GRZ and make a positive contribution to the scale up of HIV/AIDS services in Zambia. The Partnership also faces many challenges. These challenges will only be met through close collaboration with the MOH, USAID, other donor agencies, and partner organizations.

Notable challenges exist in the following areas:

➤ **Human Resources**

Staff capacity and availability at all levels within the provinces are below what is required, especially at the health center level. The addition or expansion of HIV-related services further strains the situation. As a response to this, ZPCT has developed and implemented a plan to support HCWs who work extra shifts, as well as training and placing lay counselors and ASWs to relieve some HCWs burdens for counseling.

➤ **Training and support for HCWs**

Several challenges are inherent in training in Zambia. Training for PMTCT and ART/OIs must follow the Zambia national training curricula. These are both two-week courses, and take staff from already short-staffed facilities for a long period. In addition to the service-related issues, this is also a considerable burden on the ZPCT budget. ZPCT has conducted in-house training courses, and continues to work with MOH and other partners on alternative strategies and models for training, as well as cost-savings for current trainings.

➤ **Inconsistent supplies of HIV commodities and drugs**

Although there have been improvements in supplies of HIV test kits, reagents, ARVs and other commodities, there are occasional interruptions to service provision due to erratic supplies. This situation is particularly challenging because there are so many points in the supply chain where a breakdown can occur. ZPCT works with staff in the facilities, and with the MOH and JSI/DELIVER at a national level, on quantification, record keeping, ordering, and commodity management. In addition, ZPCT procured a stopgap interim supply of reagents. USAID procurement requirements made this challenging. After receiving the final waiver in the last quarter, all remaining reagents have been procured and most received in-country. Even in these difficult budget times, ZPCT has included reagents in the next annual budget.

➤ **National Guidelines, Protocols, and SOPs**

ZPCT is reproducing and disseminating key guidelines to facilities. In addition, technical staff is working with the MOH and other partners on development of national SOPs for key procedures, and in the interim, has provided job aids in CT, PMTCT, and ART/OI to ZPCT-supported facilities to enhance quality assurance and improvement.

➤ **Implementing M&E Systems in Government Facilities**

The Ministry of Health, both at the national and provincial level, is unwilling for projects to introduce additional, burdensome reporting requirements in government health facilities. Most indicators required for ZPCT reports under the Emergency Plan are collected through the existing health information system (HMIS), but the few missing indicators and need for more regular reports (monthly vs. quarterly) continue to require additional efforts. Data entry clerks were hired, oriented, and placed in ZPCT-supported ART centers. This has improved the quality of data and increased the sustainability of improved data collection methods being introduced. Additional data entry clerks are being recruited to provide support to remaining ART sites.

➤ **Sustainability and Quality of Services**

As ZPCT expands into more districts and facilities, quality assurance and sustainability become increasingly important, and more challenging. ZPCT's central and provincial level staff will continue to provide technical assistance and mentor staff to ensure quality. ZPCT piloted QA/QI tools for all technical areas in each of the provinces and are working with facility staff and the DHMTs to establish routine QA/QI.

Strategies to respond to these challenges have been incorporated into the ZPCT work plan and are being addressed as implementation progresses.

## 6. PLANS FOR THE NEXT QUARTER

Highlights from the plans for the next quarter are described below. In addition to the specific activities listed, the ZPCT Partnership will continue to build a strong partnership with MOH and other partner organizations at the provincial and district levels, and with staff and management in facilities.

- Complete renovations and procurement of equipment and supplies for Phase 2 facilities and DHMTs.
- Conduct an assessment of nine health facilities supported by Médecins Sans Frontières (MSF) in Nchelenge District (Luapula Province) and develop plan to transition the facilities from MSF to ZPCT support.
- Initiate activities to set up a PCR laboratory at Arthur Davison Children's Hospital, including procurement of equipment and reagents, training of laboratory staff, refurbishment and specimen referral system.
- Complete procurement and refurbishments for ART Plus-Up sites, including procurement of major equipment such as computers, hematology analyzers (ABX Micros and Sysmex pocH-100i), Facscount, and chemistry analyzers (Humalyzer 2000).
- Initiate ART outreach services, as per executed Memorandum of Understanding with Ndola Catholic Diocese, at three home-based care centers (Chishilano in Ndola, Twatasha Trakk in Kitwe, and Iseni in Chingola) under the Catholic Integrated AIDS Program.
- Sponsor a two-day ART Update Seminar collaboration with the Ministry of Health and other partners to share ART program challenges, experiences, progress and best practices from key partners in Zambia and to discuss the new HIV/AIDS management trends, drug resistance, management of opportunistic infections and ART in special populations.
- In collaboration with the MOH, conduct a half-day workshop to review ZPCT's accomplishments and changes in the first two years of scaling-up HIV/AIDS services in Zambia.
- Conduct a site visit to Ndola Central Hospital with Ambassador Mark Dybul (OGAC).
- Provide support to provincial offices on decentralization.
- Provide routine testing of children in care in selected facilities.
- Complete all refurbishments and procurement at ZPCT-supported CHAZ facilities. Pilot community purchase order at one CHAZ facility catchment area with a community group.
- Finalize referral network directories of service and operations manuals and ensure that referral coordinating agencies provide leadership for the functioning of the network in Phase 1 districts
- Pilot mobile CT services in three districts and document implementation.
- Work with MOH and partners (CIDRZ, CRS, CDC, and HSSP) to pilot the GRZ-recommended Continuity of Care Patient Tracking System (CCPTS) and finalize related forms and SOPs.
- Finalize and install data entry software for the ZPCT QA/QI system in each provincial office.
- Initiate or reestablish specimen referral system at remaining health facilities (including new ART sites) in Central, Copperbelt, Luapula and North Western Provinces.
- Complete of placement of trained ASWs at ART centers to provide in-facility and community follow-up to ART clients. Identify and place additional ASWs at new ART sites.
- Complete recruitment, training and placement of data entry clerks at new ART sites.
- Recruit Associate Community Officer for Lusaka Office, Community Mobilization & Referral Officer for Luapula Provincial Office, and two Laboratory/Pharmacy Officers (one based in Ndola and one in Kasama)
- Continue to collaborate with associate partner organizations on management of agreements and implementation and reporting of project activities; provide support and monitoring to assure quality.
- Implement system and procedures for routine QA/QI in all technical areas in all project provinces.

## Attachment A: Status of ZPCT-Supported Services and Facilities

District	Health Facility	ART	PMTCT	CT	CC	Lab	Specimen Referral for CD4
<b>Central Province (16 facilities)</b>							
<b>Kabwe</b>	Kabwe General Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Mahatma Gandhi Health Center	◆ <sup>1</sup>	◆	◆	◆	◆	◆
	Kabwe Mine Hospital	◆	◆	◆	◆	◆	◆
	Bwacha Health Center		◆	◆	◆	◆	◆
	Makululu Health Center	◆ <sup>1</sup>	◆	◆	◆	◆	◆
	Pollen Health Center	◆ <sup>1</sup>	◆	◆	◆		◆
	Kasanda Urban Health Clinic	◆ <sup>1</sup>	◆	◆	◆	◆	◆
<b>Mkushi</b>	Mkushi District Hospital	◆	◆	◆	◆	◆	◆
	Chibefwe Health Center		◆	◆	◆		◆
	Chalata Health Center		◆	◆	◆		◆
	Masansa Health Center	◆ <sup>1</sup>	◆	◆	◆	◆	◆
<b>Serenje</b>	Serenje District Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Chitambo Hospital	◆	◆	◆	◆	◆	◆
<b>Chibombo</b>	Liteta District Hospital	◆	◆	◆	◆	◆	◆
	Chikobo Rural Health Center		◆	◆	◆		◆
	Mwachisompola Health Demonstration Zone		◆	◆	◆	◆	◆
<b>Copperbelt Province (29 facilities)</b>							
<b>Ndola</b>	Ndola Central Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Arthur Davison Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Lubuto Health Center	◆ <sup>1</sup>	◆	◆	◆	◆	◆
	Chipulukusu Health Center	◆ <sup>1</sup>	◆	◆	◆	◆	◆
	Chipokota Mayamba Health Center	◆ <sup>1</sup>	◆	◆	◆	◆	◆
	Mushili Clinic		◆	◆	◆		◆
	Nkwazi Clinic		◆	◆	◆		◆
	Kawama Health Center		◆	◆	◆	◆	◆
	Ndeke Health Center		◆	◆	◆		◆
<b>Chingola</b>	Nchanga N. General Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Chiwempala Health Center	◆ <sup>1</sup>	◆	◆	◆	◆	◆
	Kabundi East Clinic	◆ <sup>1</sup>	◆	◆	◆	◆	◆
	Chawama Health Center		◆	◆	◆	◆	◆
<b>Kitwe</b>	Kitwe Central Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Ndeke Health Center	◆ <sup>1</sup>	◆	◆	◆	◆	◆
	Chimwemwe Clinic	◆ <sup>1</sup>	◆	◆	◆	◆	◆
	Buchi Health Center		◆	◆	◆	◆	◆
	Luangwa Health Center		◆	◆	◆	◆	◆
	Ipusukilo Health Center	◆ <sup>1</sup>	◆	◆	◆	◆	◆
<b>Luanshya</b>	Thompson District Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Roan General Hospital	◆	◆	◆	◆	◆	◆

District	Health Facility	ART	PMTCT	CT	CC	Lab	Specimen Referral for CD4
	Mikomfwa Health Center		◆	◆	◆		❖
	Mpatamatu Sec 26 Urban Clinic		◆	◆	◆	◆	❖
<b>Mufulira</b>	Kamuchanga District Hospital	◆	◆	◆	◆	◆	❖
	Ronald Ross General Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Clinic 3 Mine Clinic		◆	◆	◆		❖
	Kansunswa Health Center		◆	◆	◆	❖	❖
<b>Kalulushi</b>	Kalulushi Government Clinic	◆	◆	◆	◆	◆	◆
	Chambishi Health Center	❖ <sup>1</sup>	◆	◆	◆	◆	◆
<b>Luapula Province (12 facilities)</b>							
<b>Mansa</b>	Mansa General Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Senama Health Center	❖ <sup>1</sup>	◆	◆	◆	◆	◆
	Central Clinic		◆	◆	◆	◆	◆
	Matanda Rural Health Center			◆	◆		❖
	Chembe Rural Health Center		◆	◆	◆	❖ <sup>2</sup>	◆
<b>Kawambwa</b>	Kawambwa District Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Mbereshi Hospital	◆	◆	◆	◆	◆	◆
	Kawambwa Health Center		◆	◆	◆		◆
<b>Mwense</b>	Mambilima Health Center (CHAZ)	◆ <sup>1</sup>	◆	◆	◆	◆	◆
	Mwense Health Center		◆	◆	◆	◆	◆
<b>Samfya</b>	Lubwe Mission Hospital (CHAZ)	◆	◆	◆	◆	◆ <sup>3</sup>	
	Samfya Health Center	◆ <sup>1</sup>	◆	◆	◆	◆	◆
<b>Northern Province (17 facilities)</b>							
<b>Kasama</b>	Kasama General Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Kasama Urban Health Center		◆	◆	◆	◆	◆
	Location Urban Health Center	❖ <sup>1</sup>	◆	◆	◆	◆	◆
	Chilubula Mission RHC (CHAZ)		◆	◆	◆	◆	◆
	Lukupa Rural Health Center		◆	◆	◆	◆	◆
<b>Nakonde</b>	Nakonde Rural Health Center	◆	◆	◆	◆	◆ <sup>3</sup>	
	Chilolwa Rural Health Center		◆	◆	◆		◆
	Waitwika Rural Health Center		◆	◆	◆		◆
	Mwenzo Rural Health Center		◆	◆	◆	❖ <sup>2</sup>	◆
<b>Mpika</b>	Mpika District Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Mpika Health Center		◆	◆	◆		◆
<b>Chinsali</b>	Chinsali District Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Chinsali Health Center		◆	◆	◆		◆
<b>Mbala</b>	Mbala General Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Mbala Urban Health Center		◆	◆	◆	❖	◆
	Tulemane Urban Health Center		◆	◆	◆	◆	◆
<b>Mpulungu</b>	Mpulungu Health Center	◆ <sup>1</sup>	◆	◆	◆	◆	◆
<b>North Western Province (13 facilities)</b>							
<b>Solwezi</b>	Solwezi General Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	

District	Health Facility	ART	PMTCT	CT	CC	Lab	Specimen Referral for CD4
	Solwezi Urban Health Center	❖ <sup>1</sup>	◆	◆	◆	◆	◆
	Mapunga Rural Health Center		◆	◆	◆	◆	❖
	St. Dorothy Rural Health Center	❖ <sup>1</sup>	◆	◆	◆	◆	◆
	Mutanda Health Center		◆	◆	◆		❖
<b>Zambezi</b>	Zambezi District Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Zambezi Urban Health Center			◆	◆		❖
	Mize Health Center		◆	◆	◆		❖
<b>Kabompo</b>	Kabompo District Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	St. Kalembe Rural Health Center (CHAZ)		◆	◆	◆	◆	◆
<b>Mwinilunga</b>	Mwinilunga District Hospital	◆	◆	◆	◆	◆ <sup>3</sup>	
	Kanyihampa Health Center		◆	❖	◆		◆
<b>Mufumbwe</b>	Mufumbwe District Hospital	❖	❖	❖	❖	❖	

◆ Services have started	1 = Outreach ART Site
❖ Services are planned, but not yet started	2 = Facility has a laboratory but not yet functional
*Phase 1 Facilities are shaded	3 = Referral laboratory for CD4

**Attachment B: ZPCT Training Courses  
(1 July – 30 September 2006)**

**Table 1: Counseling and Testing**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
CT*	10/09/06 to 23/09/06	Copperbelt	Ndola	1	1
			Luanshya	2	2
			Kitwe	4	5
			Mufulira	4	6
			Chingola	4	4
			Kalulushi	2	2
CT*	6/08/06 to 19/08/06	Northern	Kasama	3	4
			Nakonde	3	5
			Mpika	2	3
			Mpulungu	1	1
			Mbala	3	3
			Chinsali	2	3
CT*	16/07/06 to 29/07/06	Luapula	Mansa	3	9
			Kawambwa	2	5
			Mwense	2	3
			Samfya	2	3
			<b>Total</b>	<b>40</b>	<b>59</b>

\*The training included one-day on monitoring and evaluation.

**Table 2: CT Refresher**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
CT Refresher	21/08/06 to 26/08/06	Central	Kabwe	7	8
			Mkushi	3	3
			Serenje	1	2
			Chibombo	2	2
			<b>Total</b>	<b>13</b>	<b>15</b>

**Table 3: CT Lay Counselors (Community Volunteers)**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Lay counseling	19/06/06 to 2/07/06	Copperbelt North Western	Ndola	2	4
			Luanshya	4	6
			Kitwe	2	4
			Chingola	2	4
			Zambezi	1	2
			Solwezi	1	2
			<b>Total</b>	<b>12</b>	<b>22</b>

**Table 4: Counseling Supervision**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Counseling Supervision	4/09/06 to 15/09/06	Central	Kabwe	5	5
			Mkushi	1	2
			Serenje	1	1
			Chibombo	3	3
			<b>Total</b>	<b>10</b>	<b>11</b>

**Table 5: Couples Counseling**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Couple Counseling	26/06/06 to 1/07/06	Luapula	Mansa	5	5
			Kawambwa	3	3
			Mwense	2	2
			Samfya	2	2
			<b>Total</b>	<b>12</b>	<b>12</b>

**Table 6: PMTCT**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
PMTCT*	14/08/06 to 26/08/06	Copperbelt	Ndola	4	4
			Luanshya	3	4
			Kitwe	4	4
			Mufulira	3	3
			Chingola	2	2
			Kalulushi	2	3
PMTCT*	10/07/06 to 22/07/06	Northern	Kasama	4	5
			Nakonde	3	4
			Mpika	2	4
			Mpulungu	1	1
			Mbala	2	4
			Chinsali	2	4
PMTCT*	4/09/06 to 16/09/06	Luapula	Mansa	5	9
			Kawambwa	3	5
			Mwense	2	3
			Samfya	2	3
PMTCT*	19/07/06 to 29/07/06	Central	Kabwe	6	10
			Mkushi	2	3
			Serenje	2	5
			Chibombo	3	5
			<b>Total</b>	<b>57</b>	<b>85</b>

\*The training included one-day on monitoring and evaluation.

**Table 7: PMTCT Refresher**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
PMTCT Refresher	17/07/06 to 22/07/06	Copperbelt	Ndola	9	15
			Kitwe	3	4
			Mufulira	1	2
			<b>Total</b>	<b>13</b>	<b>21</b>

**Table 8: Adherence Counseling (HCWS)**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Adherence Counseling	21/08/06 to 22/08/06	Luapula	Mansa	2	8
			Mwense	1	1
			Samfya	1	1
			<b>Total</b>	<b>4</b>	<b>10</b>



**Table 9: ART/Clinical Care**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
ART/OIs	31/07/06 to 4/08/06	Luapula	Mansa Samfya	2 1	14 2
ART/OIs	28/07/06 to 6/08/06	Copperbelt	Kitwe	3	30
ART/OIs*	21/08/06 to 2/09/06	All provinces	Luanshya	1	2
			Kitwe	1	3
			Mufulira	1	3
			Kawambwa	1	1
			Samfya	1	1
			Mansa	1	1
			Kabwe	3	5
			Kasama	2	4
			Solwezi	2	2
			Mufumbwe	1	2
			Total	20	70

\*The training included one-day on monitoring and evaluation.

**Table 10: ART/Clinical Care: Pediatrics**

Training Course	Dates	Province/District		Number of Facilities	Number Trained
Pediatric ART /OIs	17/07/06 to 12/08/06	Northern	Kasama	3	11
			Nakonde	1	6
			Mpika	2	9
			Mpulungu	1	7
			Mbala	3	15
			Chinsali	2	9
Pediatric ART /OIs	18/09/06 to 22/09/06	Copperbelt	Ndola	4	10
			Kitwe	4	15
			<b>Total</b>	<b>20</b>	<b>82</b>

**Table 11: ART Adherence Support Workers (Community Volunteers)**

Table 11: ART Adherence Support Workers (Community Volunteers)					
Training Course	Dates	Province/District		Number of Facilities	Number Trained
ASW	4/09/06 to 14/09/06	Copperbelt	Ndola Luanshya	2 1	4 3
ASW	4/09/06 to 14/09/06	Copperbelt	Kitwe Chingola Mufulira Kalulushi	2 3 1 1	3 7 3 2
ASW	4/09/06 to 14/09/06	North Western	Solwezi Mufumbwe	2 1	4 2
ASW	4/09/06 to 14/09/06	Luapula	Mansa Kawambwa Samfya	1 1 2	4 1 3
ASW	4/09/06 to 14/09/06	Northern	Kasama Mpulungu Chinsali	2 2 1	3 2 1
ASW	4/09/06 to 14/09/06	Central	Kabwe Mkushi Serenje	2 2 1	5 2 1
			<b>Total</b>	<b>27</b>	<b>50</b>

**ATTACHMENT C:**  
**ZPCT TECHNICAL STRATEGIES**  
**September 30, 2006**

**Counseling and Testing**

**Prevention of Mother-to-Child Transmission**

**Clinical Care and Antiretroviral Therapy (ART/OI)**

**Pharmacy**

**Laboratory**

**Training**

**Community Mobilization**

**Referral Network**

**Monitoring and Evaluation**

## Technical Overview

HIV counseling and testing (CT) is the entry point to comprehensive HIV/AIDS services - treatment, care and support. However, only 11.4% of males and 15.3% of females in Zambia have been tested for HIV. In addition, although there are increasing numbers of infected children due to high prevalence among pregnant women and low national PMTCT coverage and uptake, there has been limited focus on children. If Zambia is to achieve the goal of making HIV/AIDS services accessible to all that need them, CT must be made easily accessible and acceptable to communities.

ZPCT will assist the Government of Zambia (GRZ) to expand geographical coverage for CT, increase the number of clients seen in some of the existing underutilized CT services, promote male access and uptake, and broaden the range of services provided at CT sites to include both client-initiated and provider-initiated services, prevention of mother-to-child transmission (PMTCT), including diagnosis of pediatric HIV.

High standards of CT are critical, and providers are trained to uphold these standards which include the voluntary nature of HIV testing, the need to obtain informed consent, confidentiality of the process, and access to high-quality supportive counseling.

## Technical Strategy

The ZPCT Partnership, in collaboration with the GRZ, will facilitate expansion and strengthening of CT in the five northern provinces of Zambia - Central, Copperbelt, Luapula, Northern and North Western. By September 2006, CT services were initiated or strengthened in 85 CT sites in the target provinces. To expand access and coverage as rapidly as possible, ZPCT is working with the District Health Management Teams (DHMTs) and facility staff to identify and broaden entry points to testing. In each of the health facilities, space has been identified and will be dedicated to CT services.

To facilitate rapid scale up of CT services, including expanding access and coverage as rapidly as possible, ZPCT in collaboration with the Provincial Health Offices (PHOs), DHMTs and facility management is broadening entry points for testing by:

- Expanding testing to clinical areas such as sexually transmitted infections (STI) and tuberculosis (TB) clinics, in-patient and general outpatient departments, home care programs, and in post-exposure situations
- Expanding testing to children in pediatric services and other clinics
- Expanding and integrating CT services linked to antenatal clinic (ANC) services
- Establishing CT rooms within the health facilities for those who just want to know their status
- Use of lay counselors in health facilities and communities
- Innovations such as use of multidisciplinary mobile outreach counseling teams
- Working to ensure same day testing and results; provision of testing corners in CT rooms
- Provision of testing corners to provide same day results in TB clinics
- Developing and adapting quality assurance (QA) tools for CT and supporting the systems in the facilities
- Developing and/or adapting job aids for use by health care workers (HCWs)
- Providing on-going mentoring, supervision and monitoring and evaluation of CT services
- Sensitizing trained health care workers to make deliberate efforts to refer clients who are positive to care and treatment

## **Key Activities**

At facility level:

- Infrastructure improvement: Refurbishment of identified CT rooms within facility.
- Human resources: Training of health care workers, lay counselors, couple counselors and counselor supervisors to support CT services.
- Distribution of national HIV CT guidelines to all facilities and orientation of staff in their use, development of standardized and tailored standard operating procedures for CT for the different levels of facilities and cadres (rural health center, peri-urban health center, and hospital; HCW use vs. lay counselor).
- Test kits and supplies: ZPCT will ensure that facility and DHMT staff is trained in forecasting and procurement of HIV test kits and supplies to ensure an uninterrupted supply.
- Strengthen CT services in clinical areas such as TB, STI and ANC clinics.
- Operationalizing completed quality assurance tools for CT in all facilities
- Continue regular individual and group supervision for counselors.
- Distribution of job aids and information, education and communication materials to all facilities.
- Regular supportive supervisory visits to facilities to ensure quality.

At community level:

- Increase awareness and mobilize the community for increased access to and use of CT services.
- Establish strong, workable referral networks to and from facilities/community with DHMT.
- Implement mobile CT services for hard to reach areas.

At PHO/DHMT level, ZPCT will support their HIV/AIDS activities by:

- Participating in annual planning meetings and ensure integration of ZPCT activities into PHO and DHMT annual plans.
- Participating in the quarterly supportive supervision and assessment visits to all ZPCT sites.
- Providing management and supervisory training as needed for DHMT staff.

## **List of Indicators and Targets**

Indicator	Targets (1 April 2006 to 31 March 2007)	Achievements (1 April 2006 to 30 Sept 2006)	Achieved to Date (1 May 2005 to 30 Sept 2006)
<b>Health care providers trained in CT</b> (basic & refresher CT, couple counseling, counseling supervision)	<b>290</b>	<b>152</b> (79 Basic CT, 34 supervisors, 24 couple counselors & 15 refresher CT)	<b>449</b> (285 basic CT, 125 counseling supervision, 24 couple counselors & 15 refresher CT)
<b>Lay counselors trained in CT</b>	<b>112</b>	<b>69</b>	<b>152</b>
<b>Number of service outlets providing CT</b>	<b>N/A</b>	<b>85</b>	<b>85</b>
<b>Number of clients tested and received results</b>	<b>43,990</b>	<b>29,103</b>	<b>62,361</b>

## **Challenges**

- **Human resource constraints:** ZPCT will continue to train lay counselors and place them at facilities to help with the pre-test counseling and also provide on-going supportive counseling.
- **Inadequate counseling space** in some of the facilities.
- **Lack of community awareness** of the availability of comprehensive HIV/AIDS care packages. ZPCT is promoting community mobilization by different community groups such as neighborhood health committees (NHCs), CBOs, NGOs, and faith-based groups to increase awareness and demand.
- **Stigma and discrimination:** Health care worker sensitization training is conducted to create community acceptable services at the clinics.
- **Shortages of test kits and supplies** due to non availability at central level or due to poor forecasting and procurement practices. There is ongoing training of staff in forecasting, procurement to make sure the district procurement needs are correctly identified.

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## Technical Overview

According to the Ministry of Health in 2005, an estimated 25% of pregnant women are HIV positive and approximately 40% of babies born to HIV-positive mothers are infected with the HIV virus. There are increasing numbers of infected children due to the high prevalence among pregnant women and low national PMTCT coverage and uptake. ZPCT is working with the Ministry of Health (MOH) to integrate prevention of mother-to-child transmission (PMTCT) into existing maternal and child health services at national, provincial and district levels in Central, Copperbelt, Luapula, Northern and North Western Provinces to:

- Prevent HIV infection in women of childbearing age through risk reduction counseling of ANC and Maternal and Child Health (MCH) clients and their partners and promote PMTCT services at the community and facility levels.
- Prevent unintended pregnancies among HIV-infected women through referrals to family planning (FP) services.
- Prevent peri-natal HIV infection through universal counseling and testing, short-course ARV prophylaxis for mothers and infants, good obstetric practices and safe infant feeding counseling and support.
- Ensure follow-up care and support for mother-infant pairs and their families through provision of and referrals to comprehensive HIV/AIDS care, treatment and support services.

## ZPCT's Technical Strategy

ZPCT is working closely with the Government of Zambia (GRZ) to scale-up PMTCT activities as part of a comprehensive HIV prevention, care and support program. The PMTCT component is being integrated and closely coordinated with MCH and FP services, and linked to other HIV prevention, care, treatment and support efforts in the facilities and community. The minimum PMTCT package is being offered, strengthened, and monitored at all ZPCT-supported PMTCT sites. ZPCT's technical approach includes:

- Integration of counseling and testing (CT) for women and their partners in ANC settings using the 'opt out' approach which is in the national PMTCT guidelines.
- Antiretroviral chemoprophylaxis and full ART for those who qualify.
- Strengthening linkages between PMTCT services and FP as part of the continuum of care.
- Providing comprehensive care and support to mothers, children and their families (PMTCT-Plus). ZPCT will facilitate CD4 count for all pregnant women and refer those who are eligible for ART.
- Strengthening of PMTCT services and follow-up care and support through: post-natal counseling; infant feeding counseling; community follow-up and support; mother-infant tracking through the under-five clinics at MCH to facilitate co-trimoxazole prophylaxis for all HIV-exposed babies from six weeks, infant HIV testing at the appropriate age and linkage to care.
- Development of a mobilization and sensitization plan to initiate or strengthen male partner involvement to maximize utilization of all aspects of PMTCT services (from HIV testing, infant feeding choices to pediatric HIV testing, care and treatment). This will be achieved through:
  - Scaling up existing outreach programs to support male involvement in ANC through traditional, church and other opinion leaders in rural areas
  - Promoting couple counseling
  - Piloting model approaches to improve male involvement in ANC in urban settings.

## Key Activities

In each of the facilities that ZPCT supports, the following are the activities:

- Infrastructure: refurbishment of identified PMTCT rooms within the facilities, as needed.

- Capacity building: training of health care workers (doctors, midwives, nurses, clinical officers, and laboratory and pharmacy staff) in PMTCT, and mentoring trained staff by provincial ZPCT CT and PMTCT staff as they provide services. This also includes training of non-health workers as PMTCT motivators.
- Laboratory and pharmacy support: training of facility and DHMT staff in forecasting and procurement of HIV test kits, supplies and NVP to ensure an uninterrupted supply.
- Quality Assurance systems: developing and adapting QA tools for CT and supporting the initiation of QA systems in the facilities.
- Job aids: developing and/or adapting job aids for use by HCWs.
- Monitoring and evaluation: ensure correct entry of data by the counselors to ensure that the program is running effectively and reaching its intended goals.
- Supportive supervision to the supported sites.
- Strengthening referral systems for both clients as well as laboratory samples.

At community level, ZPCT will focus on creating demand in the ZPCT-supported health facility catchment areas by:

- Increasing awareness and mobilizing the community for increased access to and use of PMTCT services.
- Establishing strong, workable referral networks to and from facilities/community in collaboration with DHMTs.
- Developing a referral model that provides care and support by linking HIV-infected women receiving PMTCT services and their families to ART services.
- Mobilizing for male involvement in PMTCT activities.

### List of Indicators and Targets

Indicator	Targets (1 April 2006 to 31 March 2007)	Achievements (1 April 2006 to 30 Sept 2006)	Achieved to Date (1 May 2005 to 30 Sep 2006)
Number of service outlets providing PMTCT	N/A	84	84
Health care providers trained in PMTCT ( Full PMTCT & refresher PMTCT)	200 (150 in full PMTCT & 50 in refresher)	85 (Full PMTCT) 21 (Refresher PMTCT)	354 (333 Full PMTCT & 21 Refresher)
Pregnant women provided with PMTCT services	30,033	26,792	53,597
Pregnant women provided with Nevirapine	6,757	2,230	4,093

### Challenges

- **Human resource constraints**: ZPCT has initiated limited support for health care workers who work additional shifts beyond their regular hours.
- **Inadequate space for counseling** in the ANC, labor and delivery and postnatal wards
- **Lack of awareness** of the availability of comprehensive HIV/AIDS care packages – PMTCT motivators have been trained in some of the communities to mobilize around PMTCT. Other identified community groups, such as neighborhood health committees and faith-based organizations, will also be involved.
- **Male involvement**: There is very limited male involvement in ANC and postnatal care while men are normally the decision makers even on matters of health for a pregnant woman. It is therefore critical that they are involved. PMTCT motivators will assist with this activity.
- **Stigma & discrimination**: ZPCT conducts health care worker sensitization on stigma reduction.
- **Shortages of test kits and supplies** hinder the smooth running of services. ZPCT is procuring emergency test kits to fill current gaps while working with JSI/Deliver and the MOH for ongoing procurement.

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## **Technical Overview**

Zambia is one of 15 focus countries that benefit from the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). Zambia has a population of 10.9 million with approximately one million Zambians who are HIV positive. An estimated 280,000 people may require treatment. By the August 2006 only 67,000 were receiving ART. ZPCT, through USAID and PEPFAR, is working with the Government of Zambia (GRZ) to scale up counseling and testing (CT), prevention of mother-to-child transmission (PMTCT), clinical care and antiretroviral therapy (ART) in Central, Copperbelt, Luapula, Northern and North Western provinces. ZPCT is currently working at national, provincial and district level with the MOH in 25 of the 42 districts. ZPCT provides support to 50 ART sites and 87 clinical care sites.

## **Technical Strategy**

The ZPCT Partnership is supporting the Ministry of Health (MOH) in their plans to scale up provision of quality comprehensive clinical care services for people living with HIV/AIDS (PLHA) through rapid capacity building of health care workers (HCWs), ensuring provision of treatment for opportunistic infections (OIs) and ART, assisting with quantification and forecasting of ARV drugs at the provincial and district level, providing needed test kits and laboratory equipment, and renovating facilities to provide comprehensive ART services. ZPCT support includes:

- Strengthening development or adaptation of policies, guidelines and standard operating procedures (SOPs) in line with requirements of the MOH.
- Facilitating training to build capacity of staff in Adult and Pediatric ART, including post-exposure prophylaxis (PEP), effective management of OIs in line with national guidelines, and adherence counseling.
- Providing ART information system training in collaboration with the monitoring and evaluation (M&E) staff immediately following ART training.
- Ensuring initiation or strengthening of ART centers in the 5 targeted provinces.
- Strengthening pediatric HIV services, particularly improvement of infant diagnosis through DNA PCR, sample referral using dried blood spots using filter paper, as well as routine CT for children in care.
- Establishing strong linkages between clinical care and CT/PMTCT/TB/STI/Youth-friendly services.
- Establishing systems to manage laboratory sample transfers from remote areas and health centers to facilities that have CD4 count machines.
- Facilitating outreach programs for ART trained medical doctors to health centers to manage ART clinics.
- Providing supportive supervision for the trained staff to ensure delivery of quality health services.

## **Key Activities**

### **Technical Assistance and Support**

Technical assistance and mentoring will continue in 50 ZPCT-supported ART centers (29 static ART centers and 21 ART outreach sites in ZPCT-supported clinics). There will be an increased focus on outreach and on improving and expanding pediatric ART services. Technical assistance and support will include:

- Assisting with the roll-out of the Patient Tracking System (PTS) for ART clients, including orientation and support of staff and management in ZPCT-supported facilities in the use of the system.
- Implementation of QA/QI systems for ART and Clinical Care, in collaboration with Provincial Health Offices (PHOs), District Health Management Teams (DHMTs), and facility partners.
- Establishing a comprehensive care center for the family (parents and children) at Arthur Davison Children's Hospital; improving infrastructure, with provision of diagnostic and monitoring equipment (including a PCR machine) and staff capacity through training in Pediatric OI/ART management to enhance early HIV diagnosis and effective management.
- Providing technical assistance and mentoring in pediatric AIDS treatment to ART centers and outreach sites, with attention to dosing issues, working with families, and disclosure issues.
- Ensuring children exposed to HIV infection are provided with needed clinical care and co-trimoxazole prophylaxis, and those eligible for ART are provided with appropriate treatment by ensuring availability of pediatric formulations.
- Strengthening linkage of pediatric HIV programs to PMTCT, by strengthening intra- and inter-facility referral of perinatally exposed children for DNA PCR and CT in all ZPCT-supported facilities.

- Strengthening ART outreach to 21 health facilities, as well as three home-based care centers operated by Ndola Catholic Diocese.
- Training HCWs in ART/OI management, early diagnosis and effective management of pediatric HIV/AIDS in all ART sites, adherence counseling for HCWs and training community members as adherence support workers.
- Integrating and strengthening the TB/HIV links through opt-out provider-initiated HIV testing and ensuring effective management of co-infections through early and appropriate referral to ART.

### **List of Indicators and Targets**

Indicator	Target (April 1 2006 to March 31, 2007)	Achievements (April 1 2006 to September 30 2006)	Achieved to Date (May 1, 2005 to September 30, 2006)
Health care providers trained in ART/OI	100	95	478
Adherence Support Workers Trained	145	152	172
Number of health providers trained in Pediatric HIV/AIDS management	150	141	141
Number of service outlets strengthened/expanded to provide clinical palliative care services	N/A	86	86
Number of service outlets providing ART services	N/A	39	39
Number of clients provided with Clinical Care services including management of OIs and/or prophylaxis	N/A	32,510	32,510
New HIV+ clients on ART	13,686	8,904	19,719
Persons receiving ART	25,152	25,003	25,003
New pediatric clients on ART	395	542	1,266
Pediatric patients receiving treatment	1,019	1,597	1,597
TB infected clients receiving CT services	3,333	1,902	1,902
HIV-infected clients attending HIV care/treatment services that are receiving treatment for TB disease (New Cases)	1,641	668	668

### **Challenges**

- Inadequate laboratory equipment and erratic supply of reagents for HIV testing and monitoring of clients on ART has caused disruption in the delivery of quality ART services. The sample referral systems are in place at most ART sites, and the CD4 Facscount reagents suppliers will maintain equipment in ZPCT sites.
- Limited human resources, particularly medical officers, hinders the roll out of ART services. ZPCT continues to provide transport reimbursements for extra shifts for the HCWs at health facilities, as well as support travel of medical officers, pharmacy and laboratory staff to health facilities to provided outreach ART services.
- Pediatric ART Challenges: Very few children are on ART due to the lack of knowledge and confidence in the management of pediatric cases. ZPCT continues to train HCWs in the management of pediatric HIV/AIDS cases and ensuring the supply of pediatric formulations in ART sites, ZPCT also continues to strengthen the follow up of babies born to HIV positive mothers and sensitizing guardians and parents on the importance of testing the children in order to access comprehensive HIV/AIDS Care.
- Referral linkages have continued to improve in the last quarter and ZPCT will continue to work with facilities to strengthen links between CT, post-PMTCT, TB, STI, under-five and clinical care services.
- Erratic supply of Drugs for OI management: The MOH awaits the drugs procured through the Global Funds Round 4 with the help of JSI/Deliver. ZPCT will ensure that when these drugs are available at MSL they will reach the ZPCT facilities
- Limitations of facility-based palliative care. Although palliative care is an important part of the continuum of care, the facility's role is rather limited. ZPCT recognizes this and, while strengthening services within the clinics, linkages with other organizations and partners engaged in palliative care and quality of life have been established. Provincial offices are linking with other institutions and organizations in the districts involved in HIV/AIDS programming, including home-based care, palliative care, as an important step in providing a full continuum of care for PLHAs within the district.

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## **Technical Overview**

The mandate of ZPCT is to assist the Government of Zambia to increase access and utilization of HIV/AIDS prevention, care and treatment services in Central, Copperbelt, Luapula, Northern and North Western Provinces. Critical to this endeavor is the availability and management of needed commodities to support pharmaceutical services and the qualified staff to deliver these services. The bottom line indicator of pharmaceutical commodity management is that high-quality commodities are continuously available and appropriately used, achieving the desired therapeutic outcomes in the patients.

## **Technical Strategy**

Pharmacy support activities are a part of a comprehensive HIV prevention, care and support program. The component is integrated and closely coordinated with counseling and testing (CT), prevention of mother-to-child transmission (PMTCT), antiretroviral therapy (ART) and clinical care services, and linked to other HIV support efforts in the facilities and community. ART pharmacy services will be strengthened and monitored at all ZPCT-supported ART, PMTCT and CT sites. ZPCT's technical approach includes:

- Train staff at the facility level to effectively forecast, quantify, order, procure, and store antiretroviral drugs (ARVs), opportunistic infection (OI) drugs, and other drugs and supplies (training and management support) in order to eliminate stock outs.
- Improve storage (identify space, refurbish/renovate rooms) and enhance storage conditions for pharmacy stores at health centers.
- Provide pharmacies with essential equipment to support pharmaceutical management.
- Strengthen the inventory management systems, logistics, commodities and security for ARVs, OIs, and drugs for palliative care as well as strengthening logistics, delivery procedures, and distribution subsystems at the facility level.
- Assist the GRZ in the formulation and implementation of Standard Operating Procedures (SOPs) for inventory management systems, supervision & technical assistance, record keeping, good dispensing practices.

## **Key Activities**

Training of pharmacy staff:

- In the use of the automated Zambia Pharmacy ART program (ARTServ Dispensing Tool),
- Product selection and quantification (procurement)
- Commodity management, including forecasting, timely ordering of needed stock, maintaining minimum/maximum stock levels and rotating stock
- Dispensing practices, medication use counseling, adherence counseling, Adverse Drug Reactions (ADR) reporting, rational and irrational drug use
- SOPs and site specific adaptation of the same

Providing supervisory support and technical assistance to pharmacies to:

- Ensure appropriate use of the ARTServ Dispensing Tool to monitor and improve patient care,
- Improve/strengthen logistics and delivery procedures/distribution subsystems for ARVs, drugs for OIs and palliative care and other drugs,
- Strengthen rational drug use and reporting system for drugs, including for ARVs,
- Strengthen adverse drug reaction (ADR) reporting, ADR monitoring, and feedback systems including for ARVs,
- Ensure timely distribution of ARVs, OIs and medical/surgical supplies to relevant health centers to avoid stock outs, and
- Increase pharmacy staff expertise and improve delivery of medication use counseling and patient follow up particularly on ADRs and therapy adherence.

Introduce automated systems to selected health centers to enhance the process of accurate inventory management of commodities.

For pharmaceutical services, ZPCT collaborates with and works within the GRZ national systems and programs. In addition, ZPCT works closely with other cooperating partners on key issues at all levels. The Partnership collaborates with JSI/Deliver on quantification and forecasting issues, including providing information about the status of service provision and stocks at ZPCT-supported sites and facilities. In addition, ZPCT maintains liaison with Medical Stores Limited (MSL) on issues of stock levels of commodities, and coordinating the timely placement of orders from the facilities with MSL to fall in with their delivery schedules.

### **Challenges**

- **Human resources:** There is a critical shortage of pharmacy staff in most facilities. ZPCT is working with the MOH to set up a mechanism to assist staff working extra shifts.
- **Policy:** Due to staff shortages other HCWs are dispensing drugs to patients. When it comes to ART, this is a very critical area and needs to be handled by suitably qualified personnel.
- **Infrastructure:** ZPCT recognizes the need to have an optimal work environment and storage conditions and is assisting the GRZ to refurbish pharmacies.
- **ARVs, OI drugs & drugs for palliative care supply:** There is a vital need for an uninterrupted supply of these commodities and ZPCT is working closely with GRZ and JSI/Deliver to ensure that ZPCT sites are catered for in the national quota.
- **Distribution:** Distribution at provincial and district level is vital for an uninterrupted supply of commodities. ZPCT is assisting at these levels and coordinating with MSL at national level to coordinate distribution of supplies to support sites.
- **Quality of services:** There is need to ensure continuous quality of pharmaceutical service delivery. ZPCT is implementing SOPs, conducting ongoing training, and providing supportive supervision and mentorship to staff.

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**September 2006**

## **Technical Overview**

The mandate of ZPCT is to assist the Government of Zambia to increase access and utilization of HIV/AIDS prevention, care and treatment services in the Central, Copperbelt, Luapula, Northern and North Western Provinces. Critical to this endeavor is the availability and management of needed commodities and equipment to provide high quality laboratory services. ZPCT recognizes the importance of maintaining high-quality laboratory services while scaling up HIV/AIDS services. The laboratory network plays a pivotal role in establishing diagnosis of HIV and opportunistic infections, monitoring treatment, disease progression and surveillance.

## **Technical Strategy**

Laboratory service activities are part of a comprehensive HIV prevention, care and support program. The component is integrated and closely coordinated with CT, PMTCT, ART and clinical care services (including TB/HIV), and linked to other HIV support efforts in the facilities and community. Laboratory services will be strengthened and monitored at all ZPCT-supported ART, PMTCT and CT sites. ZPCT's technical approach includes:

- Training staff at the facility level to effectively forecast, quantify, order, procure, and store laboratory supplies in order to eliminate stock outs/overstocking of reagents.
- Improving storage (identify space, refurbish/renovate rooms) and enhance storage conditions in laboratories at health centers.
- Providing essential standard equipment to enable laboratories carry out critical diagnostic test required for ART, HIV clinical care, PMTCT and CT services.
- Setting up testing corners in PMTCT, CT, and TB areas manned by counselors to promote same day testing with results. These are supervised by the laboratory staff to ensure quality of testing.
- Ensuring that quality laboratory services are provided at all facilities by using and strengthening sample referral systems.
- Strengthening the inventory management systems, (logistics, commodities and security for laboratory supplies) as well as strengthening delivery procedures, and distribution subsystems at the facility level.
- Assisting the GRZ in the formulation, reviewing and implementation of Standard Operating Procedures (SOPs).
- Initiating and/or strengthening internal quality control (QC) and external quality assurance (QA) in order to promote quality results and confidence in laboratory services.
- Training and mentoring laboratory staff to use and maintain laboratory equipment.

## **Key Activities**

Training of laboratory staff in:

- Product selection and quantification (procurement)
- Commodity management, including forecasting, timely ordering of needed stock, maintaining minimum/maximum stock levels and rotating stock
- Virology and immunology of HIV, HIV diagnosis, monitoring and follow up

- Routine preventive maintenance of equipment
- Specimen collection, handling and processing
- Laboratory safety and ethics
- SOPs and QA (internal and external)
- The use of Logistics Management Information Systems

Provide supervisory support and technical assistance to laboratories to:

- Improve/strengthen logistics and delivery procedures/distribution subsystems for diagnostics
- Strengthen rational use and reporting system for laboratory supplies/reagents
- Ensure timely performance of tests and release of results
- Ensure timely distribution of laboratory supplies/reagents to relevant health facilities to avoid stock outs
- Improve/strengthen the use of batch internal quality control
- Introduce automated systems to selected facilities to enhance the process of accurate inventory management of commodities.

ZPCT laboratory services collaborate and work within the GRZ national policies. In addition, ZPCT works closely with other cooperating partners on key issues at all levels. ZPCT collaborates with JSI/Deliver on quantification and forecasting issues, including providing information about the status of service provision and stocks at ZPCT-supported facilities. In addition, ZPCT coordinates key laboratory support efforts with CDC. This includes providing input and collaborating on laboratory information system, training materials, and the national laboratory quality assurance system being established by CDC with the GRZ. ZPCT also maintains liaison with Medical Stores Limited (MSL) on issues of stock levels of commodities, and coordinating the timely placement of orders by the facilities in line with MSL delivery schedules.

## **Challenges**

- **Human resources:** There is a critical shortage of laboratory staff in most facilities. ZPCT is working with the MOH to set up a mechanism to assist staff working extra shifts.
- **HIV Testing Policy:** Due to staff shortages other HCWs can be testing for HIV. ZPCT will assist with reviewing algorithms and testing guidelines and training packages in accordance with GRZ standards.
- **Infrastructure:** ZPCT recognizes the need to have an optimal work environment and is assisting the GRZ to refurbish laboratories.
- **HIV test kit / Reagent supply:** There is a vital need for an uninterrupted supply of HIV test kits and other reagents. ZPCT is assisting with stop gap procurements of these commodities.
- **Distribution:** Distribution at provincial and district level is vital for an uninterrupted supply of commodities. ZPCT is assisting at these levels and coordinating with MSL at national level to coordinate distribution of supplies to ZPCT supported sites.
- **Diagnostic Equipment and Quality Assurance:** ZPCT is working closely with GRZ and CDC to ensure ZPCT sites are maintained at the highest quality of service provision. This includes ensuring equipment calibration and routine preventive maintenance.
- **Equipment Maintenance:** Well-maintained and functional equipments are critical to providing diagnostic and monitoring services to patients. ZPCT is working with GRZ, CDC and equipment suppliers to maintain equipment for CD4, hematology and chemistry and thereby ensure uninterrupted provision of services.

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**September 2006**

### **Technical Overview**

With the HIV prevalence currently estimated at 16% among the 15- 49 year old age group and estimated 280,000 eligible for antiretroviral therapy (ART), the Government of Zambia (GRZ) is grappling with the challenge of training health care workers to provide effective, quality services as the ART program is expanded. Training and retention of adequate human resources is central to the successful scale up of HIV/AIDS prevention, care and treatment programs, to meet the national goal of reducing prevalence rates and expanding provision of ART to the high rate of people currently infected with HIV. However, critical shortages of health staff, partly due to the high rate of qualified health staff migration to other countries, continue to be a challenge for the GRZ.

### **Technical Strategy**

ZPCT is assisting the GRZ to train health care workers (HCWs) in counseling and testing (CT), prevention of mother-to-child transmission (PMTCT), clinical care, pharmacy and laboratory services to facilitate scale up of the ART, CT and PMTCT programs in Central, Copperbelt, Luapula, Northern and North Western provinces. National training packages and national trainers are being used where available and ZPCT is working with the Ministry of Health (MOH) to develop and adapt national training packages for technical areas where none are available.

- ZPCT works closely with the MOH at the national level to build the corps of national trainers in ART, OIs, CT and PMTCT. Program training activities are planned and implemented in partnership with the MOH and the Provincial Health Offices (PHO).
- ZPCT is working with the PHOs and the district health management teams (DHMT) to ensure that training supported by ZPCT is integrated into the relevant action and training plans.
- Capacity building efforts include monitoring and supervision. ZPCT will work with the MOH, Health Services and Systems Program (HSSP), and other relevant partners to expand and improve tools used in the provinces, districts, and health centers to guide supervision and monitoring of service provision.
- ZPCT will work with DHMTs and PHOs to provide consistent and timely follow up of issues noted during supervisory and performance assessment visits. Assistance will be provided through visits, during routine monthly and quarterly meetings, and other continuing education opportunities.

## Key Accomplishments

Activities	Achievements to Date (1 May 2005 to 30 September 2006)
Provincial level trainings in various technical areas	<p>The following numbers of HCWs were trained in each technical area:</p> <ul style="list-style-type: none"><li>➤ Counseling &amp; Testing (CT): 285</li><li>➤ CT refresher: 15</li><li>➤ Counselling supervision: 125</li><li>➤ Couple counseling: 24</li><li>➤ Lay counselors: 152</li><li>➤ ART/OI: 478</li><li>➤ ART/Pediatric: 141</li><li>➤ Adherence Support Workers: 172</li><li>➤ Adherence Counseling (HCWs): 253</li><li>➤ PMTCT: 333</li><li>➤ PMTCT Refresher: 21</li><li>➤ Laboratory and Pharmacy: 180</li><li>➤ Monitoring &amp; Evaluation: 52 (36 data entry clerks and 16 health information officers)</li><li>➤ Monitoring &amp; Evaluation for HCWs: 1030</li></ul>

## Challenges

- **Critical shortage of staff in health facilities:** There is a shortage of staff at health facilities and existing staff are over stretched to provide services. While trainings are essential, on-going services are disrupted when health care workers are away from health facilities for trainings. Innovative training approaches such as on-site training and continuing education seminars are being implemented where possible.
- **Cost of Training:** Training requires development of national training packages, guidelines, training of trainers and provision of logistics to facilitate training. ZPCT is exploring training ZPCT staff and MOH provincial staff as national trainers, using government training institutions and holding on-site trainings to reduce costs while maintaining a high level of quality.
- **Retention of trained staff:** Once trained it is important that the health care workers remain at the facility where possible or at least stay within the MOH system.
- **Lack of national training packages in some technical areas:** ZPCT is working with the MOH and other partners to develop training materials in areas such as CT and Adherence counseling.

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## Technical Overview

Community awareness of the HIV/AIDS services being offered in health facilities and perception of the benefits of these services is fundamental to increased uptake. The Zambia Sexual Behavior Survey (2005) indicated that less than 30% of communities in Zambia are aware of HIV counseling and testing sites. The goal of community mobilization within ZPCT is to increase uptake of HIV/AIDS services, particularly counseling and testing (CT) and prevention of mother-to-child transmission (PMTCT) in Central, Copperbelt, Luapula, Northern and North Western provinces by increasing awareness of availability and benefits of these services in the community.

## Technical Strategy

ZPCT's approach to community mobilization is partnering with community based organizations and structures operating within the health facilities' catchment areas and strengthening their mobilization activities.

- **Working with Community-Based Structures**  
ZPCT is working with community-based organizations and structures within the catchment areas of ZPCT supported facilities to increase awareness of and access to HIV/AIDS services. This includes a variety of community level partners, including Neighborhood Health Committees that work around targeted sites. These partners are limited financial support for structured mobilization and referral activities to increase uptake of CT and PMTCT services. In addition, the Expanded Church Response on HIV/AIDS (ECR), a faith-based organization, is an important partner for community mobilization. Through ECR, ZPCT will mobilize church communities in selected districts to access HIV/AIDS services in ZPCT supported sites. This is achieved by mobilizing church leaders, training community motivators and organizing testing days.
- **Lay Counselors**  
In order to address the shortage of health care workers in health facilities that it supports, ZPCT has trained community volunteers in counseling and testing. This has freed up the time of overburdened health care workers. The lay counselors will offer pre- and post- test counseling at the health facility as well as provide information and referral in the community. Following changes on the national guidelines for HIV CT, ZPCT will provide on site training in HIV testing for lay counselors.
- **Adherence Support Workers (ASWs)**  
ZPCT has trained community volunteers to support people living with HIV/AIDS (PLHA) in adherence related issues including pre-treatment counseling, the basics of CT, ethics and professional behavior, the roles and responsibilities of ASWs and referral. The ASWs provide services at the health facilities and also follow-up clients in the community.
- **Reducing Stigma and Discrimination levels**  
Stigma and discrimination among health care workers (HCWs) contribute to reduced uptake of CT and PMTCT. Low staff morale and poor working conditions, coupled with staff shortages and erratic drug supplies contribute to HCWs feeling frustrated, exhausted and powerless to help patients. In addition, HCWs' behavior towards PLHA and perceptions of HIV/AIDS may alienate patients. If exhibited, stigmatizing behavior may lead to patients feeling neglected, ignored, insulted or mishandled and care and treatment are compromised. ZPCT is training HCWs in stigma issues, the rights of PLHA and actions that address stigma.
- **Mobile CT services**  
In addition to strengthening services at the health facility, ZPCT will pilot mobile strategies to increase access to CT services in remote areas and to increase access in crowded urban compounds. Mobile activities will focus on moving out of the facilities to reach people with CT before they are ill, to provide services in districts where distance is an issue in accessing services.

## **Key Activities**

- **Support to targeted community mobilization activities**

ZPCT is providing direct support to community based organizations through community purchase orders - a simple funding mechanism designed by ZPCT to fund discrete, results-focused and defined community mobilization activities such as door-to-door campaigns, focus group discussions, motivational talks and drama performances. Community level partners are being oriented in CT, PMTCT and referral networks as a means of ensuring effective mobilization and referrals. For example, ECR, a ZPCT associate partner, has trained church leaders in mobilization and motivating community members to access HIV/AIDS services and is establishing church coordinating committees around sites in Chingola, Kabwe and Mkushi districts. Through the church structures, community members are referred to health facilities for HIV/AIDS services. The mobilization activities being implemented by ECR are linked to the district wide referral network.

- **Accurate messages during mobilization**

Two community job aids, one for CT and one focusing on PMTCT, have been developed and distributed to community partners to serve as tool for community mobilization. Each job aid is a card which has key messages explaining what CT and PMTCT are and the benefits of knowing one's status. The cards have provision for the community volunteer using the card to input where and when services are offered within their catchment area.

- **Training and placement of lay counselors**

152 lay counselors have been trained in the five provinces. In conjunction with the local DHMT, the lay counselors have been placed in the health facilities and provide CT services as well as ongoing supportive counseling.

- **Adherence Support Workers**

172 ASWs have been trained by ZPCT and are providing adherence counseling both in the health facilities and in the community. ZPCT has provided bicycles to the ASWs to facilitate follow up of clients.

- **Mobile CT**

ZPCT has drafted guidelines and for the implementation of mobile CT activities, and developed a plan for a pilot of two mobile CT models in three districts. ZPCT staff is collaborating with the DHMT and partners in these districts to mobilize resources, implement, and document the pilot. The Expanded Church Response, through the coordinating committees will offer counseling and testing services during VCT days in local churches.

## **Challenges**

- **Monitoring of community mobilization activities:** Most community based organizations have little or no experience in data collection and documenting of referrals. This makes it challenging to establish how many clients referred from mobilization activities actually reach the health facility and access services. ZPCT provincial staff are working closely with community level partners and health care workers to ensure community mobilization activities and referrals are well documented.
- **Use of existing community structures:** In some districts, community level partners have limited capacity and experience in structured, documented mobilization for HIV/AIDS services and community volunteers often have competing priorities, such as income generating activities. ZPCT, in collaboration with the DHMT and other district level partners, will strengthen existing mobilization activities.
- **Increased access to counseling and testing:** Access to CT has been challenged by the fact that health care workers (HCW) are overstretched and do not have the time to provide CT services. Even where lay counselors have been placed, the HCW is required to conduct the HIV test. With the guidance given by the current national CT guidelines, ZPCT will explore the possibilities of training lay counselors in HIV testing.
- **Motivating and retaining community volunteers:** Increasingly, training and use of volunteers are a response to the human resources issues plaguing Zambia's health care systems. While there are many advantages to the incorporation of community members into HIV/AIDS prevention and care, challenges also exist, including providing fair and appropriate motivation to sustain these volunteers. ZPCT continues to collaborate with partners, both governmental, and non-governmental, to reach consensus on equitable terms and conditions for these important team members.

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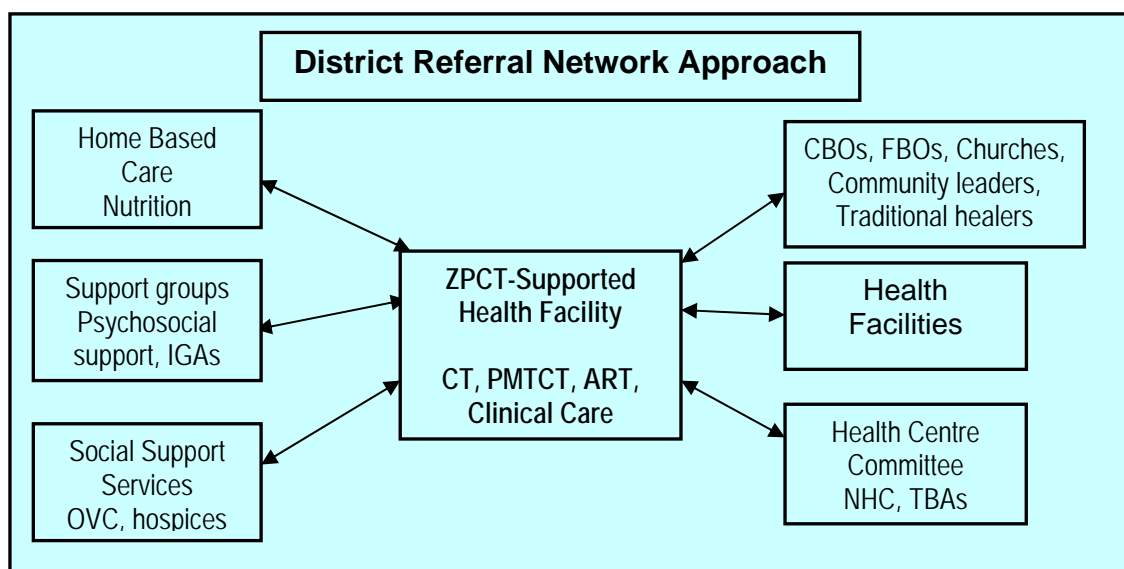


### Technical Overview

People living with HIV/AIDS (PLHA) have a broad spectrum of needs including medical care, psychosocial support, nutritional, financial, material and spiritual support which is not possible for one organization to meet. This makes it important for service providers to coordinate service provision to increase the quality of life for PLHA. In order to provide a continuum of care to PLHA and address all of these different needs, ZPCT is working with the Provincial Health Offices (PHOs), District Health Management Teams (DHMTs), District AIDS Task Forces (DATFs), and a range of other partners in Central, Copperbelt, Luapula, Northern and North Western provinces to establish or strengthen district-wide referral networks in ZPCT supported districts. The goal of these referral networks is to increase access to comprehensive HIV care and support services and to facilitate the systematic and formal linking of HIV/AIDS related services to ensure that clients receive these services.

### Technical Strategy

ZPCT's strategy is to collaborate as a catalyst and active participant to formalize a referral network comprised of organizations providing HIV/AIDS-related services within a district. The network is managed at the district level to allow for coordination among service providers and community. ZPCT's contribution to the network is focused on the referral activities around the health facilities it supports. ZPCT provides orientation to community level partners on the use of standard referral tools which are used to refer community members to ZPCT supported sites for HIV/AIDS services. Health care workers are also oriented in the use of the tools to allow records of referrals received to be filed at the facility, as well for referring clients to ongoing support services in the community. ZPCT provides limited funds to the DHMT for referral activities around its sites. ZPCT has undertaken this effort in nine districts initially, and will expand to additional districts with lessons learned from the functional networks.



### Key Activities

- **Initial Meeting of Service Providers:** Initially, ZPCT holds a meeting of all service providers to introduce the concept of the network, obtain buy-in and facilitate selection of a referral coordinating unit.
- **Identification of a Referral Coordinating Unit:** The referral coordinating unit, selected through a participatory process by network members, is responsible for convening meetings of network members,

coordinating activities, mobilizing resources and providing technical assistance to new members. The referral coordinating unit takes the lead in the development of standard referral tools to be used by network members.

- **Development of Referral Tools:** The referral network in each participating district has gathered information on existing referral forms and facilitated the development of a standardized form.
  - **Referral Form:** The referral form is a tool that is used to introduce the client being referred to the receiving organization and identifies the services required as well as the referring organization. The second half of the form is completed by the receiving organization with information on what services were provided to the client and what his/her ongoing needs are. This section of the form is returned to the referring organization with permission of the client.
  - **Referral Register:** The referral register is a tool used to document all referrals made and received. The registers are filled in by referral focal persons in member organizations.
  - **Directory of Services:** The directory of services is an inventory of organizations providing HIV-related services for PLHA and their families within the district. This allows for the referring organization to identify other organizations that would best fulfill the clients' needs.
  - **Referral Operations Manual:** The referral operations manual is a document developed by all network members to guide the functioning of the network. The manual defines the principles and processes for the referral network. The referral tools are appended to the manual.
- **Monitoring of Referrals:** Referral focal point persons are identified at each ZPCT-supported facility and in community partner groups to document referrals. In all agreements with community partners funded by ZPCT, indicators, targets, and mechanisms for gathering data on referrals are defined before implementation. ZPCT staff ensure that forms are being filled out correctly and that data on referrals is collected and aggregated, both from facilities and from community groups supported by ZPCT.
- **Quarterly Referral Meetings:** After the network is established, meetings are held on a quarterly basis to share experiences around the referral process, address challenges and update the directory of services.

### **Challenges**

- **Transport:** Clients referred to services often have difficulty reaching the service due to illness and transport challenges, including logistics and funds. ZPCT is supporting ART outreach services, bringing ART services to health centers to increase access for more clients. In addition, ZPCT will expand its ART outreach program to several home-based care programs in Copperbelt Province, as well as offer mobile CT services, in order to bring services to the client.
- **Coordination:** The referral coordinating agencies often implement other activities and find it difficult to prioritize the implementation of their coordinating function. ZPCT will support the referral agency by ongoing technical support for referral activities around the health facilities it supports.
- **Resource mobilization:** ZPCT has played a facilitative role in mobilizing network members to organize and select a district referral coordinating unit. A confusion of roles has led to an over dependence on ZPCT and has delayed the establishment of a functional, self-sustaining network led by the referral coordinating unit. The referral coordinating units will be urged to include discussion of these in future quarterly meetings, and to propose that this important activity be included in organizational budgets, including that of the DHMTs.
- **Increased burden to services:** As referral activities have gained momentum, some network members report difficulties in meeting the increased demand for services. Strategies to resolve this issue will be considered within referral networks, with the leadership of the referral coordinating unit. .

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## Technical Overview

ZPCT is working with the Ministry of Health (MOH) to strengthen the Health Management Information System (HMIS) to ensure that it satisfies the data needs of all stakeholders in the HIV/AIDS service provision programs. Specifically, the ZPCT Partnership will support implementation of a rigorous monitoring and evaluation (M&E) effort that facilitates real-time evidence-based decision-making to guide rapid scale-up, as well as respond to the information needs of Zambia's MOH, the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), USAID/Zambia and National AIDS Committee (NAC). ZPCT is working with all partners to harmonize the information systems of different HIV/AIDS data systems to avoid duplication of efforts in support of the "three ones" principle of one M & E system in the country.

## Technical Strategy

The M&E system designed for ZPCT focuses on activities undertaken and results achieved at the facility, district and provincial levels in the five target provinces of Central, Copperbelt, Luapula, Northern and North Western and provide a basis for:

- Monitoring performance in achieving rapid scale-up of quality HIV-related services;
- Ensuring that best practices for ART/clinical care, Counselling and Testing (CT) and prevention of mother-to-child transmission (PMTCT) service provision are documented and shared with other stakeholders in these thematic areas;
- Ensuring that best practices for ART are developed through evidence-based approaches and implemented properly by monitoring adherence, immunologic and clinical response, and applying results from program activities;
- Measuring the contribution of program efforts to the achievement of the MOH, PEPFAR, USAID/Zambia and the NAC objectives; and
- Strengthening M&E capacity at the national, provincial and district levels.

ZPCT M&E activities will:

- **Ensure adequate conceptualization & implementation of a harmonized M&E system** by ensuring that the ZPCT M&E system is consistent with national M&E plans and requirements, that all the M&E indicators, data sources, baselines, targets, data collection activities and timeframes for data reporting are consistent between partners without creating a duplication of activities at all levels.
- **Ensure adequate utilization of the results from M&E activities to improve the implementation of project activities.** The ZPCT M&E unit will document and disseminate to relevant partners ZPCT's progress towards targets during project implementation and ensure that M&E results are presented in ways/formats that can facilitate critical programmatic decision-making at the facility, district, provincial and national levels.
- **Ensure sustainability of the M&E efforts.** The ZPCT M&E unit will provide technical assistance on M&E to partners, sub-grantees and relevant national, provincial, and district level staff to strengthen their M&E activities. The unit conducts workshops, refresher in-service training, on-the-job training, and mentoring to strengthen local capacities on M&E to ensure sustainability of all these activities even beyond the project's lifespan.

## **Key Activities**

- A total of 38 data entry clerks have been recruited and placed at ZPCT ART sites.
- Training all health care and health information office staff in the ART support facilities in the GRZ's ART Information System (ARTIS).
- Training all health care and health information office staff in the ZPCT supported facilities in GRZ's CT/PMTCT Information System.
- Provide on-site technical assistance and mentoring of the health information staff at all levels (for district, hospital and provincial staff) in MOH and ZPCT.
- Supply of essential equipment (such as computers) for data storage and reporting in ART clinics and District Health Offices where needed.
- The development and adoption of a standardized patient tracking system (for all ART clinics) in collaboration with MOH and other partners has reached an advanced stage with the initial training of trainers workshop held during the quarter.
- Strengthen all clinical care support services in information management - laboratory, pharmacy and logistics management.
- The unit has conducted data audits for all ZPCT sites for the period from May to Sept 2005 and Oct 2005 to March 2006. The May to Sept 2005 report has since been submitted to USAID by ZPCT while the Oct 2005 to March 2006 and July to September 2006 reports will be submitted in the current quarter.

## **Challenges**

- **Human Resources:** A critical bottleneck to collecting data for M&E activities has always been staff shortages. The continued recruitment of data entry clerks at facility level is addressing the reporting needs. Thus, ZPCT supported sites are now able to submit their monthly and quarterly returns to the DHMT and subsequently to ZPCT on time.
- **Training:** All training activities carried out by ZPCT include one or two days reserved for data collection tools and reporting so that all facility staff are aware of the reporting requirements.
- **Patient Information Management System/Patient Tracking System:** In its continued collaboration with GRZ, ZPCT is working with other partners to develop a Patient Tracking System (PTS) for ART program monitoring and reporting. This PTS is planned to be part of the national HMIS. An HMIS system—apart from ensuring accurate data collection—must be able to provide data for patient clinical management and answer operational questions and mainstream lessons learned into national ART programming. The current HMIS for ART (ARTIS) is being reviewed at the national level since health facility staff report that the system is time consuming and involves substantial duplication. In its current form, it would become almost unmanageable as patient load increases.
- **Infrastructure/Equipment:** ZPCT will ensure that all facilities providing ART have a computer to host the PTS database. Necessary support and accessories for the computer will also be provided to ensure continuous data entry and reporting. Almost all ART facilities have these computers in place and only await the introduction of the PTS once the process (harmonization) to make it operate in line with minimum GRZ data requirements has been completed by GRZ and all participating partners (CDC, HSSP, CIDRZ, CRS).

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